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QY 661 TTCAGAGAAATTAATTTAAAGACCCCTTAAACCCCTTAA 702
Db 78 TTCAGAGAAATTAATTTAAAGACCCCTTAAACCCCTTAA 37

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DEFINITION Porcine circovirus type 2 strain SC, complete genome.
ACCESSION AF465211
VERSION AF465211.1 GI:18448942
KEYWORDS porcine circovirus type 2.
SOURCE porcine circovirus type 2.
ORGANISM Viruses; ssDNA viruses; Circoviridae; Circovirus.
REFERENCE 1 (bases 1 to 1768)
AUTHORS Wang, C., Pan, C. H., Huang, C. C., Huang, T. S., Jong, M. H., Lin, S. Y. and Lai, S. S.
TITLE Complete nucleotide sequences of porcine circovirus type 2 isolated in pigs with various clinical syndromes
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1768)
AUTHORS Wang, C., Pan, C. H., Huang, C. C., Huang, T. S., Jong, M. H., Lin, S. Y. and Lai, S. S.
TITLE Direct Submission
JOURNAL Submitted (02-JAN-2002) Hog Cholera Department, National Institute for Animal Health, 376 Chung-cheng Road, Tamsui, Taipei 25101, Taiwan

FEATURES
source Location/Qualifiers
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Best Local Similarity 93.0%; Pred. No. 5.6e-168;
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Search completed: May 18, 2003, 11:41:48
Job time : 2030 secs

Viruses; ssDNA viruses; Circoviridae; Circovirus.
1 (bases 1 to 1767)
Hutet,E. and Albina,E.
Circovirus sequences related to piglet weight loss disease (pwd)
Patent: WO 929871-A 10 17-JUN-1999;
HUTET EVELYNE (FR); ALBINA EMANUEL (FR)
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Location/Qualifiers
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Matches 702; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 94 CAGATCTCTCCCGCGCCCTGCTGCTCCACCCCGCCCGCTTACCGTGGAGAAG 153
QY 121 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAAGCGAAC 180
DB 154 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAAGCGAAC 213
QY 181 ACAGTCAGAGCGCCCTCTGCGCGGTGACATGATGAGATTCAATTAATGACTTTCT 240
DB 214 ACAGTCAGAGCGCCCTCTGCGCGGTGACATGATGAGATTCAATTAATGACTTTCT 273
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DB 694 TTCAGAGAAATTAATTTAAAGACCCCGCCACTTACCCCTTAA 735
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LOCUS Porcine circovirus type 2 isolate FRA3, complete genome.
DEFINITION AF201311
ACCESSION AF201311.1 GI:7021361
VERSION

porcine circovirus type 2.
porcine circovirus type 2
Viruses: ssDNA viruses; Circoviridae; Circovirus.
1 (bases 1 to 1767)
Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A.,
Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.
Characterisation of PCV-2 isolates from Spain, Germany and France
Virus Res. 66 (1), 65-77 (2000)
20120936
10653918
2 (bases 1 to 1767)
Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A.,
Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.
Direct Submission
Submitted (03-NOV-1999) P24, Robert Koch Institut, Nordufer 20,
Berlin 13353, Germany
Location/Qualifiers
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RESULT 5

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LOCUS Porcine circovirus type 2 isolate kaozhai, complete genome. 1767 bp DNA linear VRL 05-AUG-2002
DEFINITION Porcine circovirus type 2 isolate kaozhai, complete genome.
ACCESSION AY122275
VERSION AY122275.1 GI:22121723
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KEYWORDS

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SOURCE Porcine circovirus type 2.
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REFERENCE 1 (bases 1 to 1767)
VIRUSES: ssDNA viruses; Circoviridae; Circovirus.
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AUTHORS Cui,S.J., Li,Y., Li,J.W., Jin,H. and Tong,G.Z.
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TITLE Isolation and Identification of Porcine Circovirus Type 2
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JOURNAL Unpublished
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REFERENCE 2 (bases 1 to 1767)
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AUTHORS Cui,S.J., Li,Y., Li,J.W., Jin,H. and Tong,G.Z.
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TITLE Direct Submission
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JOURNAL Submitted (14-JUN-2002) Harbin Veterinary Research Institute of
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CAAS, No. 427, Maduanjie, Nangang District, Harbin, Heilongjiang
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150001, P. R. China
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Location/Qualifiers
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1. 1767
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ORIGIN

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RESULT 6

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AF201897/c
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LOCUS

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1767 bp DNA circular VRL 20-DEC-2000
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DEFINITION	Porcine circovirus type 2, complete genome.	
ACCESSION	AF201897	
VERSION	AF201897.1	GI:11907587
SOURCE	porcine circovirus type 2.	
ORGANISM	Viruses; ssDNA viruses; Circoviridae; Circovirus.	
REFERENCE	1 (bases 1 to 1767)	
AUTHORS	Wellenberg,G.J., Pesch,S., Berendsen,F.W., Steverink,P.J.G.M., Hunneman,W., Van der Vorst,T.J.K., Peperkamp,N.H.M.T., Ohlinger,V.F., Schippers,R., Van Oirschot,J.T. and de Jong,M.F.	
TITLE	Isolation and characterization of porcine circovirus type 2 from pigs showing signs of post-weaning multisystemic wasting syndrome in The Netherlands	
JOURNAL	Unpublished	
REFERENCE	2 (bases 1 to 1767)	
AUTHORS	Pesch,S. and Ohlinger,V.F.	
TITLE	Direct Submission	
JOURNAL	Submitted (04-NOV-1999) Virology and Molecular Epidemiology, Bioscreen European Veterinary Disease Management Center GmbH, 11 Mendelstr., Muenster, NRW 48149, Germany	
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VERSION AJ293869.1 GI:14330690
KEYWORDS rep gene; replication-associated protein gene.
SOURCE porcine circovirus
ORGANISM porcine circovirus
REFERENCE 1 (bases 1 to 1766)
AUTHORS Meehan,B.M., McNelly,F., McNair,I., Walker,I., Ellis,J.A.,
Krawkowka,S. and Allan,G.M.
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TITLE Isolation and characterization of porcine circovirus 2 from cases
of sow abortion and porcine dermatitis and nephropathy syndrome
JOURNAL Arch. Virol. 146 (4), 835-842 (2001)
MEDLINE 21296605
PUBMED 11402869
REFERENCE 2 (bases 1 to 1766)
AUTHORS Meehan,B.M., McNelly,F., McNair,I., Walker,I., West,K.,
Ellis,J.A., Krawkowka,S., Kennedy,S. and Allan,G.M.
TITLE Isolation and characterization of porcine circovirus type 2 from
cases of sow abortion and porcine dermatitis and nephropathy
syndrome
JOURNAL unpublished
REFERENCE 3 (bases 1 to 1766)
AUTHORS Meehan,B.M.
TITLE Direct Submission
JOURNAL Submitted (25-AUG-2000) Meehan B.M., Veterinary Science, The
Queen's University of Belfast, Stormont, BT4 3SD, UNITED KINGDOM
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Isolation and characterization of porcine circovirus 2 from cases of sow abortion and porcine dermatitis and nephropathy syndrome

Arch. Virol. 146 (4), 835-842 (2001)

21296605

11402869

2 (bases 1 to 1766)

Meehan,B.M., McNelly,F., McNair,I., Walker,I., West,K., Ellis,J.A., Krawkowka,S., Kennedy,S. and Allan,G.M.

Isolation and characterization of porcine circovirus type 2 from cases of sow abortion and porcine dermatitis and nephropathy syndrome

unpublished

3 (bases 1 to 1766)

Meehan,B.M.

Direct Submission

Submitted (25-AUG-2000) Meehan B.M., Veterinary Science, The Queen's University of Belfast, Stormont, BT4 3SD, UNITED KINGDOM

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Qy      661  TTCAGAGAATTAAATTTTAAAGACCCGCCACTTAACCCCTTAA 702
Db      1082 TTCAGAGAATTAAATCTTAAAGACCCGCCACTTAACCCCTTAA 1041

RESULT 8
AY035820/c
LOCUS      Porcine circovirus type 2, complete genome.
DEFINITION Porcine circovirus type 2, complete genome.
ACCESSION AY035820
VERSION    AY035820.1 GI:14422165
KEYWORDS   porcine circovirus type 2.
SOURCE     Viruses; ssDNA viruses; Circoviridae; Circovirus.
ORGANISM   Shengbo,C. and Huanchun,C.
REFERENCE  1 (bases 1 to 1767)
AUTHORS    Cloning and sequence analysis of the genome of Porcine Circovirus
TITLE      type 2 Isolated from pig with PMWS in China
JOURNAL    Unpublished
AUTHORS     Shengbo,C. and Huanchun,C.
TITLE      Direct Submission
JOURNAL    Submitted (16-MAY-2001) Animal Medicine, Hua Zhong Agricultural
           University, Shi Zi Shan, Wuhan, Hubei 430070, P. R. China
FEATURES   Location/Qualifiers
            source          1..1767
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906..914
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complement(1030..1734)
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CDS

misc_feature
polyA_signal
CDS

misc_feature
CDS

misc_feature
CDS

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Best Local Similarity 94.9%; Pred. No. 1.2e-173;
Matches 665; Conservative 0; Mismatches 36; Indels 0; Gaps 0;
Qy 1 ATGACGTATCAAGAGGCGTTACCGAAGAGACACCGCCCGCGACCATCTTGGC 60
Db 1734 ATGACGTATCAAGAGGCGTTTCGCGACAGCAAGACACCGCCCGCGACCATCTTGGC 1675
Qy 61 CAGATCTCCCGCGCGCGCTCGTCCGACACCGCCCGCGACCATCTTGGC 120
Db 1674 CAGATCTCCCGCGCGCGCTCGTCCGACACCGCCCGCGACCATCTTGGC 1615
Qy 121 AAAATGGCATCTTCAACACACCGCGCTCTCCCGACCTTCGGATATCTGCAAGCAACC 180
Db 1614 AAAATGGCATCTTCAACACACCGCGCTCTCCCGACCTTCGGATATCTGCAAGCAACC 1555
Qy 181 ACAGTCAGAACCGCCCTCTCGGCGGTGCACATGATGAGATCAATTAATGACTTCTT 240
Db 1554 ACAGTCAGAACCGCCCTCTCGGCGGTGCACATGATGAGATCAATTAATGACTTCTT 1495
Qy 241 CCCCAGAGGGGTCAAAACCGCGCTCTGCGCCCTTTGATATCTACAGATAAGAAAG 300
Db 1494 CCCCAGAGGGGTCAAAACCGCGCTCTGCGCCCTTTGATATCTACAGATAAGAAAG 1435
Qy 301 GTTAAGGTGAATTCGTGCGCTCTCCCGCATCACCGGCTGACAGGGAGTGGGCTCC 360
Db 1434 GTTAAGGTGAATTCGTGCGCTCTCCCGCATCACCGGCTGACAGGGAGTGGGCTCC 1375
Qy 361 AGTCTGTTATTTAGATGATAAATTTGTAACAAAGGCGACAGCCCTACCTATGACCCC 420
Db 1374 ACTGCTGTTATTTAGATGATAAATTTGTAACAAAGGCGACAGCCCTACCTATGATCCC 1315
Qy 421 TATGTAATCTACTCTCCCGCATACCATACCGAGCCCTTCTCTACCATCTCCGGTAC 480
Db 1314 TATGTAATCTACTCTCCCGCATACCATACCGAGCCCTTCTCTACCATCTCCGGTAC 1255
Qy 481 TTTACCCCAACCTCTCTAGATTCTACTATTGATTACTTCTCAACCAACCAACAAAGA 540
Db 1254 TTTACCCCAACCTCTCTAGATTCTACTATTGATTACTTCTCAACCAACCAACAAAGA 1195
Qy 541 AACGAGCTGTGGCTGAGACTACAACTCTGGAATGTAGACAGCTAGGCGCTCGGCAC 600
Db 1194 AATCAGCTTTGGCTGAGGCTACAAACCTCTGCAATGTGGACACAGTAGGCGCTCGGCAC 1135
Qy 601 GCGTTCGAAACAGTATATAGACAGCAAGATACATATCCGTGTACCATGTATGTACAA 660
Db 1134 GCGTTCGAAACAGTATATAGACAGCAAGTACATATCCGTGTACCATGTATGTACAA 1075
Qy 661 TTCAGAGAAATTAATTTTAAAGACCCCTTAAACCTTA 701
Db 1074 TTCAGAGAAATTAATTTTAAAGACCCCTTAAACCTTA 1034
RESULT 9
AF201309/c
LOCUS AF201309 Porcine circovirus type 2 isolate SPA2, complete genome.
DEFINITION AF201309
ACCESSION AF201309
VERSION AF201309.1 GI:7021355
KEYWORDS porcine circovirus type 2.
SOURCE porcine circovirus type 2.
ORGANISM Porcine circovirus type 2.
VIRUSES: ssDNA viruses; Circoviridae; Circovirus.
REFERENCE 1 (bases 1 to 1768)
AUTHORS Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A.,
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Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.
Characterisation of PCV-2 isolates from Spain, Germany and France
Virus Res. 66 (1), 65-77 (2000)
20120936
PUBMED 10653918
REFERENCE 2 (bases 1 to 1768)
Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A.,
Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.
Direct Submission
Submitted (03-NOV-1999) P24, Robert Koch Institut, Nordufer 20,
Berlin 13353, Germany
Location/Qualifiers
1..1768
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/isolate="SPA2"
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822..1766
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BASE COUNT 456 a 358 g 500 g 454 t
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Query Match 89.3%; Score 626.8; DB 14; Length 1768;
Best Local Similarity 93.3%; Pred. No. 6.8e-169;
Matches 655; Conservative 0; Mismatches 47; Indels 0; Gaps 0;
Qy 1 ATGACGTATCAAGAGGCGTTACCGAAGAGACACCGCCCGCGACCATCTTGGC 60
Db 738 ATGACGTATCAAGAGGCGTTTCCGCGACAGCAAGACACCGCCCGCGACCATCTTGGC 679
Qy 61 CAGATCTCCCGCGCGCGCTCGTCCACCGCCCGCGCGCGCGCGCGCGCGCGAGG 120
Db 678 CAGATCTCCCGCGCGCGCGCTCGTCCACCGCCCGCGCGCGCGCGCGCGCGAGG 619
Qy 121 AAAATGGCATCTTCAACACACCGCGCTCTCCCGACCTTCGGATATCTGCAAGCAACC 180
Db 618 AAAATGGCATCTTCAACACACCGCGCTCTCCCGACCTTCGGATATCTGCAAGCAACC 559
Qy 181 ACAGTCAGAACCGCCCTCTCGGCGGTGGACATGATGAGATTAATTAATGACTTCTT 240
Db 558 ACAGTCAGAACCGCCCTCTCGGCGGTGGACATGATGAGATTAATTAATGACTTCTT 499
Qy 241 CCCCAGAGGGGGGTCAAAACCGCCCTCTGTCGCCCTTTGAATACTACAGATAAGAAAG 300
Db 498 CCCCAGAGGGGGGGACCAACAAATCTCTATACCCCTTTGAATACTACAGATAAGAAAG 439
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QY 301 GTTAAGGTTGAATCTGGCCCTGCTCCCGGATACCCAGGAGTGACAGGGGAGTGGGCTCC 360
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QY 361 AGTGCCTGTTATTTAGATGATAACTTTGTACAAGGCCACAGCCCTCACCTATGACCC 420
Db 378 ACTGCTGTTATTTAGATGATAACTTTGTACAAGGCCACAGCCCTAACCTATGACCC 319
QY 421 TATGTAACACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 480
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QY 481 TTACCCCCAAACCTGCTCAGATTTTCACTATTGATTACTTCCAAACCAACAAAGA 540
Db 258 TTACCCCCAAACCTGCTCAGATTTTCACTATTGATTACTTCCAAACCAACAAAGA 199
QY 541 AACCACTGCTGGTGAGACTACAACTGCTCGAATGTAGACCAGTGGGCTCGGCACT 600
Db 198 AATCAGCTTTGGTGAGGCTACAACTGCTCGAATGTAGACCAGTGGGCTCGGCACT 139
QY 601 GCGTTGAAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAACCATGTATGTACAA 660
Db 138 GCCTTGAACACAGTAATAGCAGCAGGACTACAAATATCCGTGTAACCATGTATGTACAA 79
QY 661 TTCAGAGAATTAATTTTAAAGACCCCACTTAAACCCCTAA 702
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RESULT 10
AF086835/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
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1768 bp DNA circular VRL 29-SEP-1998
Porcine circovirus strain 9741, complete genome.
AF086835
AF086835.1 GI:3661518
porcine circovirus.
porcine circovirus
Viruses: ssDNA viruses; Circoviridae; Circovirus.
1 (bases 1 to 1768)
Wang,L., Willson,P., Chow,B., Gibbons,E. and Babiuk,L.
Emergence of a new porcine circovirus
Unpublished
2 (bases 1 to 1768)
Wang,L., Willson,P., Chow,B., Gibbons,E. and Babiuk,L.
Direct Submission
Submitted (26-AUG-1998) VIDO, University of Saskatchewan, 120
Veterinary Road, Saskatoon, Saskatchewan S7N 5E3, Canada
Location/Qualifiers
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51..995
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BASE COUNT 464 a 360 c 480 g 464 t
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Query Match 88.8%; Score 623.6; DB 14; Length 1768;
Best Local Similarity 93.0%; Pred. No. 5.6e-168;
Matches 653; Conservative 0; Mismatches 49; Indels 0; Gaps 0;
QY 1 ATGACGTATCCAAAGGAGGCTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 60
Db 1735 ATGACGTATCCAAAGGAGGCTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 1676
QY 61 CAGATCTCTCCGCGCGCCCTTGGCTCGTCCACCCCGCCACCGCTTACCGCTGGAGAAG 120
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QY 121 AAAATGGCATCTTCAACACCGCCCTTCCCGCACCTTCGGGATATATCTGTCAAGCGAAC 180
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QY 241 CCCCAGAGGGGGTCAAAACCCCGCTCTGTGCCCTTTGAATACACAGATTAAGAAG 300
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QY 301 GTTAAGGTTGAATCTGGCGCTGCTCCCGCATACCCAGGTTGACAGGGGAGTGGGCTCC 360
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QY 481 TTTACCCCCAAACCTGCTCAGATTTTCACTATTGATTACTTCCAAACCAACAAAGA 540
Db 1255 TTTACCCCCAAACCTGCTCAGATTTTCACTATTGATTACTTCCAAACCAACAAAGA 1196
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Db 1195 AATCAGCTTTGGCTGAGGCTACAAACCTCTGGAATGTGACACGCTAGGCTCGGCACT 1136
QY 601 GCGTTGGAACAGATATATACGACAGGAATACAATATCCGTGTAACCATGTATGTACAA 660
Db 1135 GCGTTGGAACAGATATATACGACAGGAATACAATATCCGTGTAACCATGTATGTACAA 1076
QY 661 TTCAGAGAATTAATTTTAAAGACCCCACTTAAACCCCTAA 702
Db 1075 TTCAGAGAATTAATTTTAAAGACCCCACTTAAACCCCTAA 1034
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RESULT 11
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LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
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AF109398 1768 bp DNA circular VRL 23-JUL-2001
Porcine circovirus type 2-C, complete genome.
AF109398
AF109398.1 GI:4106885
porcine circovirus type 2-C.
porcine circovirus type 2-C
Viruses: ssDNA viruses; Circoviridae; Circovirus.
1 (bases 1 to 1768)
Hamel,A.L., Lin,L.L., Sachvie,C., Grudeski,E. and Nayar,G.P.
PCR detection and characterization of type-2 porcine circovirus
Can. J. Vet. Res. 64 (1), 44-52 (2000)
20142849
10680656
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REFERENCE	2 (bases 1 to 1768)
REFERENCE	Hamel, A.L. and Nayar, G.P.S.
AUTHORS	Nucleotide sequence of four different isolates of circovirus
TITLE	detected in pigs with various clinical syndromes
JOURNAL	Unpublished
REFERENCE	3 (bases 1 to 1768)
AUTHORS	Hamel, A.L. and Nayar, G.P.S.
TITLE	Direct Submission
JOURNAL	Submitted (27-NOV-1998) Virology Laboratory, Veterinary Diagnostic Laboratory, Manitoba Agriculture, 545 University Crescent, Winnipeg, Manitoba R3T 5S6, Canada
FEATURES	Location/Qualifiers
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	QKRDWNTNHHVIVGPGCGSKNAANFADETTYWKPKNKWDGTHGEVYVVIDFY
	GWLPDOLLRCORYPLTVETKGPVPFLARSILITSSPLEWYSSTAVPAVEALYR
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polyA_signal	327..332
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	/db_xref="GI:4106889"
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CDS	553..732
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Db      1255 TTTACACCAAACTGCTCCTGATGGGACATCGATTACTTCCACCAACCAACAAAAGA 1196
QY      541 AACAGCTGTGGCTGAGACTACAACTGCTGGAATGTAGACACAGTAGGCTCGGCAC 600
Db      1195 AATCAACTCTGGCTGAGACTACAACTACTGGAATGTAGACCACTGTAGGCTCGGCAC 1136
QY      601 CGGTTCAAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACCATGTATGTACAA 660
Db      1135 CGGTTCAAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACCATGTATGTACAA 1076
QY      661 TTTACAGAAATTTAATTTAAAGACCCGCCACTTAACCCCTAA 702
Db      1075 TTTACAGAAATTTAATTTAAAGACCCGCCACTTAACCCCTAA 1034

RESULT 12
AF154679/c
LOCUS      Porcine circovirus, complete genome.
DEFINITION
ACCESSION AF154679
VERSION    AF154679.1 GI:5052004
KEYWORDS   porcine circovirus.
SOURCE     porcine circovirus.
ORGANISM   Porcine circovirus.
REFERENCE  1 (bases 1 to 1768)
AUTHORS    Kuo,T.Y., Chiou,Y.C. and Lai,S.S.
TITLE      Complete nucleotide sequences analysis of porcine circovirus
           outbreak in Taiwan
JOURNAL    Unpublished
REFERENCE  2 (bases 1 to 1768)
AUTHORS    Kuo,T.Y., Chiou,Y.C. and Lai,S.S.
TITLE      Direct Submission
JOURNAL    Submitted (27-MAY-1999) Veterinary Medicine, National Taiwan
           University, 142, Chousan Road, Taipei 106, Taiwan
FEATURES   source
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BASE COUNT 451 a 367 c 495 g 455 t
ORIGIN

Query Match 88.8%; Score 623.6; DB 14; Length 1768;
Best Local Similarity 93.08; Pred. No. 5.6e-168;
Matches 653; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

QY      1 ATGACGTATCCAGAGGCGGTACCGAAGAGAGACACCGCCCGCCGAGGCATCTTGGC 60
Db      1735 ATGACGTATCCAGAGGCGGTTCGCGAGAGAGACACCGCCCGCCGAGGCATCTTGGC 1676
QY      61 CAGATCTCCGCCCGCCCGCTGCTCGTCCACCCCGCCACCGTTACCGTGGAGAAG 120
Db      1675 CAGATCTCCGCCCGCCCGCTGCTCGTCCACCCCGCCACCGTTACCGTGGAGAAG 1616
QY      121 AAAATGGCATCTTCAACACACCCCGCTCTCCCGCACCTTCGGATATATCTGTCAAGCGAAC 180

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Db      1615 AAAAATGGCATCTTCAACACACCCCGCTCTCCCGCACCTTCGGATATATCTGTCAAGCGTAGC 1556
QY      181 ACAGTCAGAACGCCCTCCTCGGGGGTGACATGATGAGATTCAATATTAATGACTTTCTT 240
Db      1555 ACAGTCAGAACGCCCTCCTCGGGGGTGACATGATGAGATTCAATATTAACGACTTTGTT 1496
QY      241 CCCCCAGAGGAGGGGTCAAAACCCCGCTCTGTGCCCTTTGAATACTACAGAATAAGAAAG 300
Db      1495 CCCCGGAGGGGGACCAACAAATCTCTATACCCTTTGAATACTACAGAATAAGAAAG 1436
QY      301 GTTAAGTTGAATTTGCGCCCTGCTCCCGGATCACCCAGGGTGACAGGGAGTGGGCTCC 360
Db      1435 GTTAAGTTGAATTTGCGCCCTGCTCCCGGATCACCCAGGGTGACAGGGAGTGGGCTCC 1376
QY      361 AGTGCTGTTATTTAGATGATACATTTGTAACAAAGCCACACCCCTCACCCTATGACCCC 420
Db      1375 ACTGCTGTTATTTAGATGATACATTTGTAACAAAGCCACACCCCTCACCCTATGACCCC 1316
QY      421 TATGTAACACTACTCCTCCCGCCATACCATAAACCCAGCCCTTCTCCTACCACCTCCCGGTAC 480
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QY      481 TTTACCCCAAACTGCTCCTAGATTTCCTACTATTGATTACTTCCAAACCAACAAAGA 540
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QY      541 AACAGCTGTGGCTGAGACTACAACTGCTGGAATGTAGACACAGTACAGCCCTCGGCAC 600
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Db      1135 CGGTTCAAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACCATGTATGTACAA 1076
QY      661 TTTACAGAAATTTAATTTAAAGACCCCGCCACTTAACCCCTAA 702
Db      1075 TTTACAGAAATTTAATTTAAAGACCCCGCCACTTAACCCCTAA 1034

RESULT 13
AF166528/c
LOCUS      Porcine circovirus complete genome.
DEFINITION
ACCESSION AF166528
VERSION    AF166528.1 GI:5739338
KEYWORDS   porcine circovirus.
SOURCE     porcine circovirus.
ORGANISM   Viruses; ssDNA viruses; Circoviridae; Circovirus.
REFERENCE  1 (bases 1 to 1768)
AUTHORS    Yang,K.H., Lee,Y.F., Chao,D.S., Shieh,Y.C. and Lai,S.S.
TITLE      Complete nucleotide sequences of porcine circovirus Tainan strand
           outbreak in Taiwan
JOURNAL    Unpublished
REFERENCE  2 (bases 1 to 1768)
AUTHORS    Yang,K.H., Lee,Y.F., Chao,D.S., Shieh,Y.C. and Lai,S.S.
TITLE      Direct Submission
JOURNAL    Submitted (08-JUL-1999) Veterinary Medicine, National Chia-Yi
           Institute of Technology, 300 Shei Fu Road, Lu Liao Li, Chia-Yi City
           600, Taiwan
FEATURES   source
            Location/Qualifiers
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            /virus="Tainan"
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            /db_xref="GI:5739339"
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BASE COUNT 453 a 367 c 492 g 456 t
ORIGIN

Query Match	88.8%;	Score 623.6;	DB 14;	Length 1768;
Best Local Similarity	93.0%;	Pred. No. 5.6e-168;		
Matches	653;	Conservative	0;	Mismatches 49; Indels 0; Gaps 0;
Qy	1	ATGACGTATCCAAGGAGGGTTCACGAGAAGAACACCGCCCGCGACGCCATCTTGGC	60	
Db	1735	ATGACGTATCCAAGGAGGGTTCACGAGAAGAACACCGCCCGCGACGCCATCTTGGC	1676	
Qy	61	CAGATCCTCCCGCGCGCGCGTCTGTCACACCGCCCGCGACGCCATCTTGGC	120	
Db	1675	CAGATCCTCCCGCGCGCGCGTCTGTCACACCGCCCGCGACGCCATCTTGGC	1616	
Qy	121	AAAAATGCGATCTTCAACACCGCGCTCTCCCGACCTTCGGATATCTGTCACAGCGAAC	180	
Db	1615	AAAAATGCGATCTTCAACACCGCGCTCTCCCGACCTTCGGATATCTGTCACAGCGAAC	1556	
Qy	181	ACAGTCAGAACCGCCCTCTCGGCGGTGACATGATGAGATTCAATATTAATGACTTCTT	240	
Db	1555	ACAGTCAGAACCGCCCTCTCGGCGGTGACATGATGAGATTCAATATTAATGACTTCTT	1496	
Qy	241	CCCCCAGAGGGGGTCAACACCGCGCTCTGTCGCGCTTGTGATCTACAGATAAGAA	300	
Db	1495	CCCCCGGAGGGGGACCAAAATCTCTATACCCCTTTGAATCTATACAGATAAGAA	1436	
Qy	301	GTTAAGGTGAATCTCGCGCTCTCCCGATCACCGGTCACAGGGTGACAGGGAGTGGCTCC	360	
Db	1435	GTTAAGGTGAATCTCGCGCTCTCCCGATCACCGGTCACAGGGTGACAGGGAGTGGCTCC	1376	
Qy	361	AGTGTGTTATTTAGATGATAACTTTGTAAACAAAGGCGACACCGCTCACTATGACCC	420	
Db	1375	ACTGCTGTTATTTAGATGATAACTTTGTAAACAAAGGCGACACCGCTCACTATGACCC	1316	
Qy	421	TATGTAACACTACTCTCCCGCATACCATACCGAGCTTCTCTACACCTCCCGGTAC	480	
Db	1315	TATGTAACACTACTCTCCCGCATACCATACCGAGCTTCTCTACACCTCCCGGTAC	1256	
Qy	481	TTTACCCCAACCTGCTCTAGATTCTACTATTGATTCTTCCACCAACCAACCAACAA	540	
Db	1255	TTTACCCCAACCTGCTCTAGATTCTACTATTGATTCTTCCACCAACCAACCAACAA	1196	
Qy	541	AACGAGCTGTGGCTGAGACTACAACTGCTGGAAATGTAGACAGTAGCGCTCGGCAT	600	
Db	1195	AATCAGCTTTGGCTGAGGCTACAACTCGGCAATGTGGACACGCTAGCGCTGGGCAT	1136	
Qy	601	CGGTTCGAAAACAGTATATAGACAGGAATACATATCCGTTGAACATGATGTACAA	660	
Db	1135	CGGTTCGAAAACAGTATATAGACAGGAATACATATCCGTTGAACATGATGTACAA	1076	
Qy	661	TTACAGAAATTAATTTAAAGACCCCGACCTTAACCCCTAA	702	
Db	1075	TTACAGAAATTAATTTAAAGACCCCGACCTTAACCCCTAA	1034	

RESULT 14
AF201307/c 1768 bp DNA circular VRL 23-FEB-2000
LOCUS Porcine circovirus type 2 isolate GER3, complete genome.
DEFINITION AF201307
ACCESSION AF201307
VERSION AF201307.1 GI:7021349
KEYWORDS porcine circovirus type 2.
SOURCE porcine circovirus type 2.
ORGANISM Viruses; ssDNA viruses; Circoviridae; Circovirus.
REFERENCE 1 (bases 1 to 1768)

AUTHORS	Mankertz, A., Domingo, M., Folch, J.M., LeCann, P., Jestin, A., Segales, J., Chmielewicz, B., Plana-Duran, J. and Soike, D.		
TITLE	Characterisation of PCV-2 isolates from Spain, Germany and France		
JOURNAL	Virus Res. 66 (1), 65-77 (2000)		
MEDLINE	20120936		
PUBMED	10653918		
REFERENCE	2 (bases 1 to 1768)		
AUTHORS	Mankertz, A., Domingo, M., Folch, J.M., LeCann, P., Jestin, A., Segales, J., Chmielewicz, B., Plana-Duran, J. and Soike, D.		
TITLE	Direct Submission		
JOURNAL	Submitted (03-NOV-1999) P24, Robert Koch Institut, Nordufer 20, Berlin 13353, Germany		
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BASE COUNT	446 a 357 c 503 g 462 t		
ORIGIN			
Query Match	88.8%; Score 623.6; DB 14; Length 1768;		
Best Local Similarity	93.0%; Pred. No. 5,6e-168;		
Matches 653; Conservative	0; Mismatches 49; Indels 0; Gaps 0;		
QY	1	ATGACGTATCAAGGAGCGGTTACCGAAGAAGAACACCGCCCGCAGCCATCTTTGGC	60
Db	738	ATGACGTATCAAGGAGCGGTTCCCGACAGCAAGAACACCGCCCGCAGCCATCTTTGGC	679
QY	61	CAGATCTCCGCGCGCGCCCTTGCTCGTCCACCCCGCCACCGTTACCGCTGGAGAAGG	120
Db	678	CAGATCTCTCCGCGCGCGCCCTTGCTCGTCCACCCCGCCACCGTTACCGCTGGAGAAGG	619
QY	121	AAAAATGCGATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCACAGCGAAC	180
Db	618	AAAAATGCGATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCACAGCGTACC	559
QY	181	ACAGTCAGAACCGCCCTCTCTGGCGGTGGACATGATGAGATTCAATATTAATGACTTTCTT	240
Db	558	ACAGTCAGAACCGCCCTCTCTGGCGGTGGACATGATGAGATTATATTAACGACTTTCTT	499
QY	241	CCCCCAGAGGGGGGTCAACACCCCGCTCTCTGCCCTTTGAATCTACTACAGAAATAGAAAG	300
Db	498	CCCCCGGAGGGGGGACCAAAATCTCTATACCCCTTTGAATCTACTACAGAAATAGAAAG	439

GenCore version 5.1.6
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Run on: May 18, 2003, 09:15:38 ; Search time 2022 Seconds
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Searched: 2054640 seqs, 14551402878 residues

Total number of hits satisfying chosen parameters: 4109280

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
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Listing first 45 summaries

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- 40: em_htgo_mus.*
- 41: em_htgo_other.*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB	ID	Description
1	702	100.0	702	6	AX003277	AX003277 Sequence
2	702	100.0	1767	6	AX003274	AX003274 Sequence
3	702	100.0	1767	6	AX003275	AX003275 Sequence
4	698.8	99.5	1767	14	AF201311	AF201311 Porcine c
5	698.8	99.5	1767	14	AF122275	AF122275 Porcine c
6	690.8	98.4	1767	14	AF201897	AF201897 Porcine c
7	682.8	97.3	1766	14	FC1293869	AJ293869 Porcine c
8	643.4	91.7	1767	14	AY035820	AY035820 Porcine c
9	626.8	89.3	1768	14	AF201309	AF201309 Porcine c
10	623.6	88.8	1768	14	AF086835	AF086835 Porcine c
11	623.6	88.8	1768	14	AF109398	AF109398 Porcine c
12	623.6	88.8	1768	14	AF154679	AF154679 Porcine c
13	623.6	88.8	1768	14	AF166528	AF166528 Porcine c
14	623.6	88.8	1768	14	AF201307	AF201307 Porcine c
15	623.6	88.8	1768	14	AF465211	AF465211 Porcine c
16	622	88.6	1768	14	AB072302	AB072302 Porcine c
17	622	88.6	1768	14	AF201308	AF201308 Porcine c
18	622	88.6	1768	14	AF201310	AF201310 Porcine c
19	622	88.6	2520	6	AX068058	AX068058 Sequence
20	622	88.6	3609	6	AX068062	AX068062 Sequence
21	620.4	88.4	1768	14	AF027217	AF027217 Porcine c
22	620.4	88.4	1768	14	AF085695	AF085695 Porcine c
23	620.4	88.4	1768	14	AF086836	AF086836 Porcine c
24	618.8	88.1	1768	14	AF086834	AF086834 Porcine c
25	618.8	88.1	1768	14	AF118095	AF118095 Porcine c
26	618.8	88.1	1768	14	AF264042	AF264042 Porcine c
27	618.8	88.1	1768	14	AF381175	AF381175 Porcine c
28	618.8	88.1	1768	14	AF381177	AF381177 Porcine c
29	617.2	87.9	1768	6	AX092147	AX092147 Sequence
30	617.2	87.9	1768	14	AB072303	AB072303 Porcine c
31	617.2	87.9	1768	14	PCAJ3185	AJ223185 Porcine c
32	615.6	87.7	1768	14	AB072301	AB072301 Porcine c
33	615.6	87.7	1768	14	AF112862	AF112862 Porcine c
34	615.6	87.7	1768	14	AF264039	AF264039 Porcine c
35	615.6	87.7	1768	14	AF264040	AF264040 Porcine c
36	614	87.5	1768	6	AX379561	AX379561 Sequence
37	614	87.5	1768	6	AX379562	AX379562 Sequence
38	614	87.5	1768	6	AX379563	AX379563 Sequence
39	614	87.5	1768	14	AF109397	AF109397 Bovine cl
40	614	87.5	1768	14	AF118097	AF118097 Porcine c
41	614	87.5	1768	14	AF381176	AF381176 Porcine c
42	614	87.5	1768	14	AF520783	AF520783 Porcine c
43	614	87.5	1768	14	AY099495	AY099495 Porcine c
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ALIGNMENTS

RESULT 1
AX003277
LOCUS
DEFINITION Sequence 12 from Patent WO9929871.
ACCESSION AX003277
VERSION AX003277.1 GI:9927101
SOURCE
ORGANISM porcine circovirus.
REFERENCE 1 (bases 1 to 702)
AUTHORS Hutet,E. and Albina,E.
TITLE Circovirus sequences related to piglet weight loss disease (pwd)
PATENT: WO 9929871-A 12 17-JUN-1999;
JOURNAL HUTET EVELYNE (FR); ALBINA EMMANUEL (FR)

AX003277 702 bp DNA linear PAT 24-AUG-2000
Sequence 12 from Patent WO9929871.

porcine multisystemic wasting syndrome; pig; vaccine; ss.

Search completed: May 18, 2003, 11:07:55

Job time : 262 secs

KW porcine multisystemic wasting syndrome; pig; vaccine; ss.

OS Porcine circovirus.

PN FR2769322-A1.

XX 09-APR-1999.

XX 22-JAN-1998; 98FR-0000873.

XX 03-OCT-1997; 97FR-0012382.

XX (MERI-) Merial SAS.

XX Allan G, Chappuis CE, Charreyre CE, Clark E, Ellis J;

PI Haines D, Harding J, Hassard L, Meehan B;

XX WPI; 1999-246948/21.

XX New type II porcine circovirus, used for, e.g. passive immunization

PT of pregnant sows

XX Claim 14; Fig 2; 48pp; French.

XX The present sequence represents the nucleotide sequence of PCV isolate
CC Imp1011-48285. The specification describes a preparation of type II
CC porcine circovirus (PCV), which is particularly isolated from a lesion,
CC from a pig with symptoms of PWS (porcine multisystemic wasting
CC syndrome). PCV (attenuated or inactivated), polypeptides derived from
CC it, and vectors that express these polypeptides are all useful in
CC vaccines, suitable for administration to adult or young pigs, or to
CC pregnant sows (for passive immunization of their offspring). DNA
CC isolated from PCV is used for in vivo or in vitro expression of viral
CC polypeptides, also as probes or primers for diagnosis in usual
CC hybridization or amplification assays. These polypeptides may also be
CC used diagnostically to detect PCV-specific antibodies, while antibodies
CC raised against the polypeptides can be used to detect antigens, in any
CC usual immunoassay format.

XX Sequence 1767 BP; 448 A; 359 C; 500 G; 460 T; 0 other;

Query Match 53.9%; Score 378.4; DB 20; Length 1767;

Best Local Similarity 98.5%; Pred. NO. 5.2e-104;

Matches 382; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 315 CTGCCCTGCTCCCGGATCACCAGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 374

DB 1767 CTGCCCTGCTCCCGGATCACCAGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTCT 1708

QY 375 AGATGATAACTTTTGAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434

DB 1707 AGATGATAACTTTTGAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1648

QY 435 CTCCCGGCATACCAATACCCAGCCCTTCTCTACACCTCCCGGTACTTTACCCCAACCC 494

DB 1647 CTCCCGGCATACCAATACCCAGCCCTTCTCTACACCTCCCGGTACTTTACCCCAACCC 1588

QY 495 TGTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAACAAACAAACAAACAAAC 554

DB 1587 TGTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAACAAACAAACAAAC 1528

QY 555 GAGACTACAACCTGCTGGAATGTAGACCACTAGGCGCTCGGCACCTGCGTTCGAAACAG 614

DB 1527 GAGACTACAACCTGCTGGAATGTAGACCACTAGGCGCTCGGCACCTGCGTTCGAAACAG 1468

QY 615 TATATACGACGAGGATACAAATATCCGGTGAACCATGTATGTAACATTCAGAGAAATTTAA 674

DB 1467 TATATACGACGAGGATACAAATATCCGGTGAACCATGTATGTAACATTCAGAGAAATTTAA 1408

QY 675 TTTTAAAGACCCCTTAAACCTTAA 702

DB 1407 TCTTAAAGACCCCTTAAACCTTAA 1380

Best Local Similarity 99.0%; Pred. No. 5.6e-105;
Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 315 CTGCCCTGTCCCGATCACCCAGGGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
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DB 1767 CTGCCCTGTCTCCCGATCACCCAGGGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTCT 1708
QY 375 AGATGATAAATTTTGTACAAAGGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
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DB 1707 AGATGATAAATTTTGTACAAAGGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1648
QY 435 CTCCCGCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 494
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DB 1647 CTCCCGCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 1588
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DB 1587 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAAACCAAGCTGTGGCT 1528
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DB 1467 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 1408
QY 675 TTTTAAAGACCCCTTAAACCTTTAA 702
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DB 1407 TCTTAAAGACCCCTTAAACCTTTAA 1380

RESULT 12

AAZ56869/c
ID AAZ56869 standard; DNA; 1767 BP.

AC AAZ56869;

XX 25-APR-2000 (first entry)

DT DNA sequence of PCV Imp.1011-48121 isolate.

DE. Antigen; porcine multisystemic wasting syndrome; PMWS; antiviral;
KW porcine circovirus; PCV; porcine parvovirus; PPV; vaccination; ds.

XX Porcine circovirus.

XX WO200001409-A2.

XX 13-JAN-2000.

XX 28-JUN-1999; 99WO-EP04698.

XX 06-JUL-1998; 98FR-0008777.

XX (MERI-) MERIAL.

PA (UYBE-) UNIV QUEENS BELFAST.

XX (UYSA-) UNIV SASKATCHEWAN.

PI Allan GM, Meehan BM, Ellis JA, Krakowka GS, Audonnet JF;

XX WPI; 2000-182091/16.

XX Use of a porcine circovirus antigen and a porcine parvovirus antigen

PT for vaccination against porcine multisystemic wasting syndrome

XX Disclosure; Fig 1: 6lpp; English.

CC The invention provides a novel antigenic preparation directed against
CC porcine multisystemic wasting syndrome (PMWS) that comprises porcine
CC circovirus (PCV) antigen and porcine parvovirus (PPV) antigen. The PCV
CC antigens and PPV antigens can be used for vaccination against PMWS. The
CC present sequence represents the DNA sequence of PCV Imp.1011-48121

CC isolate.

SQ Sequence 1767 BP; 447 A; 360 C; 502 G; 458 T; 0 other;

Query Match 54.4%; Score 381.6; DB 21; Length 1767;

Best Local Similarity 99.0%; Pred. No. 5.6e-105;

Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 315 CTGCCCTGTCCCGATCACCCAGGGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
|||||

DB 1767 CTGCCCTGTCTCCCGATCACCCAGGGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTCT 1708
|||||

QY 375 AGATGATAAATTTTGTACAAAGGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
|||||

DB 1707 AGATGATAAATTTTGTACAAAGGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1648
|||||

QY 435 CTCCCGCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 494
|||||

DB 1647 CTCCCGCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 1588
|||||

QY 495 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAAACCAAGCTGTGGCT 554
|||||

DB 1587 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAAACCAAGCTGTGGCT 1528
|||||

QY 555 GAGACTACAAACTCTGGAATGTAGACCAAGTGGCTCGGCACCTGCGTTCGAAACAG 614
|||||

DB 1527 GAGACTACAAACTCTGGAATGTAGACCAAGTGGCTCGGCACCTGCGTTCGAAACAG 1468
|||||

QY 615 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 674
|||||

DB 1467 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 1408
|||||

QY 675 TTTTAAAGACCCCTTAAACCTTTAA 702
|||||

DB 1407 TCTTAAAGACCCCTTAAACCTTTAA 1380
|||||

RESULT 13

AAAF5835/c

ID AAF5835 standard; DNA; 1767 BP.

XX AAF5835;

XX 18-MAY-2001 (first entry)

DE PCV DNA fragment of Imp 1011-48121 strain.

XX Vaccine; pig; myocarditis; abortion; intrauterine infection;

KW multisystemic wasting syndrome; ds.

XX Porcine circovirus-2.

XX WO200116330-A2.

XX 08-MAR-2001.

XX 28-AUG-2000; 2000WO-EP08781.

XX 31-AUG-1999; 99US-0151564.

XX 31-MAY-2000; 2000US-0583350.

XX (MERI-) MERIAL.

PA (UYSA-) UNIV SASKATCHEWAN.

XX (UYBE-) UNIV QUEENS BELFAST.

PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;

PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;

PI Mcneilly F;

XX WPI; 2001-244408/25.

XX Use of porcine circovirus-2 immunogen to formulate a vaccine

PT composition to treat pigs against myocarditis, abortion, intrauterine

PT infection and/or post-weaning, multisystemic wasting syndrome

XX associated with PCV-2

PS Disclosure: Fig. 1 #2; 134pp; English.

XX The present invention relates to the use of porcine circovirus-2 (PCV-2) immunogen to formulate a vaccine composition to prevent or treat pigs against myocarditis and/or abortion and/or intrauterine infection and/or post-weaning, multisystemic wasting syndrome and other pathological CC sequelae associated with PCV-2. The present sequence is a DNA fragment of CC a strain of PCV, which was used in the present invention.

XX Sequence 1767 BP; 447 A; 360 C; 502 G; 458 T; 0 other;

Query Match 54.4%; Score 381.6; DB 22; Length 1767;
Best Local Similarity 99.0%; Pred. No. 5.6e-105;
Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 315 CTGGCCCTGCTCCCGATCACCCAGGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 374

Db 1767 CTGGCCCTGCTCCCGATCACCCAGGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTT 1708

Qy 375 AGATGATAAATTGTAACAAGGCCACAGCCCTACCTATGACCCCTATGTAACACTACTC 434

Db 1707 AGATGATAAATTGTAACAAGGCCACAGCCCTACCTATGACCCCTATGTAACACTACTC 1648

Qy 435 CTCGCCCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAACC 494

Db 1647 CTCGCCCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAACC 1588

Qy 495 TGTCTAGATTCTACTATTGATTACTTCCACCAACAACAAGAACCCAGCTGTGGCT 554

Db 1587 TGTCTAGATTCTACTATTGATTACTTCCACCAACAACAAGAACCCAGCTGTGGCT 1528

Qy 555 GAGACTACAACTGCTGGAATGTAGACCAAGTGGGCTCGGCACCTGCGTTCGAAACAG 614

Db 1527 GAGACTACAACTGCTGGAATGTAGACCAAGTGGGCTCGGCACCTGCGTTCGAAACAG 1468

Qy 615 TATATACGACGAGGAATACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 674

Db 1467 TATATACGACGAGGAATACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 1408

Qy 675 TTTTAAAGACCCCACTTAACCCCTTAA 702

Db 1407 TCTTAAAGACCCCACTTAACCCCTTAA 1380

RESULT 14

AXX35379/c

ID AAX35379 standard; DNA; 1767 BP.

XX

AC AAX35379;

XX

DT 07-JUL-1999 (first entry)

XX

DE Nucleotide sequence of PCV isolate Imp1011-48285.

XX

KW PCV isolate: type II porcine circovirus; PCV; PMWS;

KW porcine multisystemic wasting syndrome; pig; vaccine; ss.

XX Porcine circovirus.

OS

PN W09918214-A1.

XX

PD 15-APR-1999.

XX

PF 01-OCT-1998; 98WO-FR02107.

XX

PR 20-MAR-1998; 98FR-0003707.

XX

PR 03-OCT-1997; 97FR-0012382.

XX

PR 22-JAN-1998; 98FR-0000873.

XX (MERI-) MERIAL.

PA

PA (UYBB-) UNIV QUEENS BELFAST.

XX (UYSA-) UNIV SASKATCHEWAN.

PI Allan G, Chappuis GE, Charreyre CE, Clark E, Ellis J;

XX Haines D, Harding J, Hassard L, Meehan B;

XX WPI; 1999-264024/22.

XX New type II porcine circovirus

PT Claim 11; Fig 2; 56pp; French.

XX

The present sequence represents the nucleotide sequence of PCV isolate Imp1011-48285. The specification describes a preparation of type II porcine circovirus (PCV), which is particularly isolated from a lesion, from a pig with symptoms of PMWS (porcine multisystemic wasting syndrome). PCV (attenuated or inactivated), polypeptides derived from it, and vectors that express these polypeptides are all useful in CC vaccines, suitable for administration to adult or young pigs, or to CC pregnant sows (for passive immunization of their offspring). DNA CC isolated from PCV is used for in vivo or in vitro expression of viral CC polypeptides, also as probes or primers for diagnosis in usual CC hybridization or amplification assays. These polypeptides may also be CC used diagnostically to detect PCV-specific antibodies, while antibodies CC raised against the polypeptides can be used to detect antigens, in any CC usual immunoassay format.

XX Sequence 1767 BP; 448 A; 359 C; 500 G; 460 T; 0 other;

Query Match 53.9%; Score 378.4; DB 20; Length 1767;

Best Local Similarity 98.5%; Pred. No. 5.2e-104;

Matches 382; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 315 CTGGCCCTGCTCCCGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTCTGTATTTT 374

Db 1767 CTGGCCCTGCTCCCGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTCTGTATTTT 1708

Qy 375 AGATGATAAATTGTAACAAGGCCACAGCCCTCAGCTATGACCCCTATGTAACACTACTC 434

Db 1707 AGATGATAAATTGTAACAAGGCCACAGCCCTCAGCTATGACCCCTATGTAACACTACTC 1648

Qy 435 CTCGCCCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAACC 494

Db 1647 CTCGCCCATACCATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAACC 1588

Qy 495 TGTCTAGATTCTACTATTGATTACTTCCAACCAACAACAAGAACCCAGCTGTGGCT 554

Db 1587 TGTCTAGATTCTACTATTGATTACTTCCAACCAACAACAAGAACCCAGCTGTGGCT 1528

Qy 555 GAGACTACAACTGCTGGAAATGTAGACCAAGTGGGCTCGGCACCTGCGTTCGAAACAG 614

Db 1527 GAGACTACAACTGCTGGAAATGTAGACCAAGTGGGCTCGGCACCTGCGTTCGAAACAG 1468

Qy 615 TATATACGACGAGGAATACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 674

Db 1467 TATATACGACGAGGAATACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 1408

Qy 675 TTTTAAAGACCCCACTTAACCCCTTAA 702

Db 1407 TCTTAAAGACCCCACTTAACCCCTTAA 1380

RESULT 15

AXX35211/c

ID AAX35211 standard; DNA; 1767 BP.

XX

AC AAX35211;

XX

DT 01-JUL-1999 (first entry)

XX

DE Nucleotide sequence of PCV isolate Imp1011-48285.

XX

KW PCV isolate: type II porcine circovirus; PCV; PMWS;


```

QY 653 ATGTACAAATTCAGAGAATTTAAATTTTAAAGACCCCGCCCTTAACCCCTTAA 702
    |||||
Db 664 ATGTACAATTCAGAGAATTTAAATTTTAAAGACCCCGCCCTTAACCCCTTAA 615
    |||||

RESULT 10
AAX35378/C
ID AAX35378 standard; DNA; 1767 BP.
XX AC AAX35378;
XX
XX 07-JUL-1999 (first entry)
XX
XX Nucleotide sequence of PCV isolate Impl011-48121.
XX
XX PCV isolate; type II porcine circovirus; PCV; PMWS;
KW porcine multisystemic wasting syndrome; pig; vaccine; ss.
XX
XX Porcine circovirus.
XX
XX WO9918214-Al.
XX
XX 15-APR-1999.
XX
XX 01-OCT-1998; 98WO-FR02107.
XX
XX 20-MAR-1998; 98FR-0003707.
XX
XX 03-OCT-1997; 97FR-0012382.
XX
XX 22-JAN-1998; 98FR-0000873.
XX
XX (MERI-) MERIAL.
XX
XX PA (UYBE-) UNIV QUEENS BELFAST.
XX
XX PA (UYSA-) UNIV SASKATCHEWAN.
XX
XX
XX Allan G, Chappuis GE, Charreyre CE, Clark E, Ellis J;
XX Haines D, Harding J, Hassard L, Meehan B;
XX
XX WPI; 1999-264024/22.
XX
XX New type II porcine circovirus
XX
XX Claim 11; Fig 1; 56pp; French.
XX
XX The present sequence represents the nucleotide sequence of PCV isolate
XX Impl011-48121. The specification describes a preparation of type II
XX porcine circovirus (PCV), which is particularly isolated from a lesion,
XX from a pig with symptoms of PMWS (porcine multisystemic wasting
XX syndrome). PCV (attenuated or inactivated), polypeptides derived from
XX it, and vectors that express these polypeptides are all useful in
XX vaccines, suitable for administration to adult or young pigs, or to
XX pregnant sows (for passive immunization of their offspring). DNA
XX isolated from PCV is used for in vivo or in vitro expression of viral
XX polypeptides, also as probes or primers for diagnosis in usual
XX hybridization or amplification assays. These polypeptides may also be
XX used diagnostically to detect PCV-specific antibodies, while antibodies
XX raised against the polypeptides can be used to detect antigens, in any
XX usual immunoassay format.
XX
XX Sequence 1767 BP; 447 A; 360 C; 502 G; 458 T; 0 other:

Query Match 54.4%; Score 381.6; DB 20; Length 1767;
Best Local Similarity 99.0%; Pred. No. 5.6e-105;
Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 315 CTGGCCCTGTCCTCCGATACCCAGGGTGACAGGGGAGTGGCGCTCCAGTGTGTTATTTT 374
    |||||
Db 1767 CTGGCCCTGTCCTCCGATACCCAGGGTGACAGGGGAGTGGCGCTCCAGTGTGTTATTTCT 1708
    |||||

QY 375 AGATGATAAATTTGTAAACAAGGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
    |||||
Db 1707 AGATGATAAATTTGTAAACAAGGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1648
    |||||

QY 435 CTCCCGCCATACCATACCCAGCCCTTCTCTCTACCACTCCCGGTACTTTACCCCAAAACC 494
    |||||

```

Query Match 54.4%; Score 381.6; DB 20; Length 1767;

PR	16-DEC-1997;	97US-0069750.
PR	11-DEC-1997;	97US-0069233.
XX		
XX	(UOUSA-) UNIV SASKATCHEWAN.	
PA		
XX		
XX	Babiuk LA, Potter AA, Wang L, Willson P;	
PI		
XX		
XX	WPI; 1999-394957/33.	
XX		
XX		
PT	New isolated porcine circovirus Type II	
XX		
XX	Claim 1; Fig 4; 82pp; English.	
PS		
XX		
CC	The present invention describes a new isolated porcine circovirus	
CC	Type II (PCVII), obtained from postweaning multisystemic wasting	
CC	syndrome-affected pigs. AAX83754 to AAX83757 represent PCVII nucleotide	
CC	sequences. AAY24929 to AAY24934 represent PCVII open reading frame (ORF)	
CC	proteins (N.B. the PCVII ORFs given in Fig 2A to Fig 2B do not	
CC	correspond exactly with the PCVII ORFs given in Fig 3A to Fig 3D).	
CC	The PCVII polypeptides can be used for treating or preventing PCVII	
CC	infection in vertebrates. The products can also be used to detect the	
CC	PCVII.	

Query Match 84.2%; Score 590.8; DB 20; Length 1361;
Best Local Similarity 91.5%; Pred. No. 2.1e-168;
Matches 650; Conservative 0; Mismatches 52; Indels 8;

Qy	1	ATGACGTATCCAAGGAGCGTTACCGAAGAGAAGACACCGCCCGCAGCCATCTTGGC	60
Db	1324	ATGACGTATCCAAGGAGCGTTACCGAAGAGAAGACACCGCCCGCAGCCATCTTGGC	126
Qy	61	CAGATCTCCGCGCGCGCCCTGGCTCTCCACCCCGCC-----ACCGTTACCGGTG	113
Db	1264	CAGATCTCCGCGCGCGCCCTGGCTCTCCACCCCGCCCTTCAGAAACCGCTACCGTTG	120
Qy	114	GAGAAGAAAATGGCATCTTCAACACCGCGCTCTCCCGCAGCTTCGGATATACHTGTCAA	173
Db	1204	GAGAAGAAAATGGCATCTTCAACACCGCGCTCTCCCGCAGCTTCGGATATACHTGTCAA	114
Qy	174	GCGAACCACAGTCAAGACGCCCTCTCTGGCGGTGGACATGATGAGATTCAAATATTAATGA	233
Db	1144	AGCTACCACAGTCAACAGCCCTCTCTGGCGGTGGACATGATGAGATTTAAATTCACGA	108
Qy	234	CTTTCTTCCCGCAGAGGGGGTCAAAACCCCGCTCTGTGGCTTTGAAATACTACAGAT	293
Db	1084	CTTTGTTTCCCGCGGGGGGCAACAAATCTCTATACCTTTTGAATCTACTACAGAT	102
Qy	294	AAGAAAGGTTAAGGTTGAATTCCTGGCCCTGCTCCCGCATCACCCAGGTGACAGGGGAGT	353

AXX83757/c
ID AAX83757 standard; DNA; 1361 BP.

DT 27-AUG-1999 (first entry)

AA Porcine circovirus type II; PCVII; PCVI; pig; infection; vaccine;
KW postweaning multisystemic wasting syndrome virus; diagnosis; ds.
KW postweaning multisystemic wasting syndrome virus; diagnosis; ds.

XX PN WQ9929717-A2

XX
PF 11-DEC-1998: 98WO-CA01130

XX

Db 1615 AAAATGCACTTTCAACACCGGCTCTCCGACCTTCGGATATACTGTCAAGCGTACC 1556
Qy 181 ACAGTCAGACGCTCTCTGGCGGTGGACATGATGAGATTCAATTAATGACTTTCTT 240
Db 1555 ACAGTCAGACGCTCTCTGGCGGTGGACATGATGAGATTCAATTAATGACTTTCTT 1496
Qy 241 CCCCCAGAGGGGTCAACCCCCCGCTCTGGCCCTTTGATATACAGATAAGAAAG 300
Db 1495 CCCCCAGAGGGGTCAACAAAAATCTCTATACCTTTGATATACAGATAAGAAAG 1436
Qy 301 GTTAAGGTGAATTTCTGGCCCTGTCTCCCGATCACCCAGGTGACAGGGAGTGGGCTCC 360
Db 1435 GTTAAGGTGAATTTCTGGCCCTGTCTCCCGATCACCCAGGTGATAGGGAGTGGGCTCC 1376
Qy 361 AGTCGTGTTATTTAGATGATACTTTGTAAAGGCCACAGCCCTCACCTATGACCCC 420
Db 1375 ACTGCTGTTATTTAGATGATACTTTGTAAAGGCCACAGCCCTAACCTATGACCCA 1316
Qy 421 TATCTAACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 480
Db 1315 TATCTAACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 1256
Qy 481 TTTACCCCAACCTGCTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAAGA 540
Db 1255 TTTACCCCAACCTGCTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAAG 1196
Qy 541 AACCACTGTGGCTGAGACTACAACTCTCTGGAATGTAGACAGTGGGCTCGGCCT 600
Db 1195 AATCAGCTTTGGCTGAGGCTACAACTCTCTGGAATGTAGACAGTGGGCTCGGCCT 1136
Qy 601 CGGTTCGAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACATGTATGACAA 660
Db 1135 CGGTTCGAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACATGTATGACAA 1076
Qy 661 TTCAGAGAAATTAATTTTAAAGACCCCGCCACTTACCCCTTAA 702
Db 1075 TTCAGAGAAATTAATTTTAAAGACCCCGCCACTTGAACCCCTAA 1034

RESULT 6

AAF75841/C
ID AAF75841 standard; DNA; 1768 BP.

XX AC AAF75841;

XX DT 18-MAY-2001 (first entry)

XX DE PCV DNA fragment of Imp 1121 strain.

XX KW vaccine; pig; myocarditis; abortion; intrauterine infection;
KW multisystemic wasting syndrome; ds.

XX OS Porcine circovirus-2.

XX PN WO200116330-A2.

XX PD 08-MAR-2001.

XX PF 28-AUG-2000; 2000WO-EP08781.

XX PR 31-AUG-1999; 99US-0151564.

XX PR 31-MAY-2000; 2000US-0583350.

XX PA (MERI-) MERIAL.

XX PA (UYSA-) UNIV SASKATCHEWAN.

XX PA (UYBE-) UNIV QUEENS BELFAST.

XX PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;

XX PI Mcneilly F;

XX WPI; 2001-244408/25.

XX

PT Use of porcine circovirus-2 immunogen to formulate a vaccine
PT composition to treat pigs against myocarditis, abortion, intrauterine
PT infection and/or post-weaning, multisystemic wasting syndrome
PT associated with PCV-2

XX Claim 11; Fig 7; 134pp; English.

CC The present invention relates to the use of porcine circovirus-2 (PCV-2)
CC immunogen to formulate a vaccine composition to prevent or treat pigs
CC against myocarditis and/or abortion and/or intrauterine infection and/or
CC post-weaning, multisystemic wasting syndrome and other pathological
CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
CC a strain of PCV, which was used in the present invention.

XX SQ Sequence 1768 BP; 452 A; 359 C; 496 G; 461 T; 0 other;

Query Match 87.9%; Score 617.2; DB 22; Length 1768;
Best Local Similarity 92.5%; Pred. No. 2.5e-176;
Matches 649; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

Qy 1 ATGACGTATCCAAAGGAGGGGTTTACCGAAGAAAGACACCGCCCGCCGACGCTTTGGC 60
Db 1735 ATGACGTATCCAAAGGAGGGGTTTACCGAAGAAAGACACCGCCCGCCGACGCTTTGGC 1676

Qy 61 CAGATCCTCCGCGCGCGCCCTGGCTGCCACCGCGCCCGCCGACGCTTTGGC 120
Db 1675 CAGATCCTCCGCGCGCGCCCTGGCTGCCACCGCGCCCGCCGACGCTTTGGC 1616

Qy 121 AAAAAATGGGATCTTCAACACCGCCCTCTCCGACCTTCGGATATATCTGCAACGCAAC 180
Db 1615 AAAAAATGGGATCTTCAACACCGCCCTCTCCGACCTTCGGATATATCTGCAACGCAAC 1556

Qy 181 ACAGTCAGAACGCGCTCTGGGGGGTGGACATGATGAGATTCAATATTAAATGACTTTCTT 240
Db 1555 ACAGTCAGAACGCGCTCTGGGGGGTGGACATGATGAGATTAAATTTGAGACTTTGTT 1496

Qy 241 CCCCCAGAGGGGGGTCAAAACCCCGCTCTGTGCCCTTTGAATACTACAGAAATGAAGAAG 300
Db 1495 CCCCCAGAGGGGGGTCAAAACCCCGCTCTGTGCCCTTTGAATACTACAGAAATGAAGAAG 1436

Qy 301 GTTAAGGTTGAATTTCTGGCGCTCTCCCGCATACCCAGGCTGACAGGGGAGTGGGCTCC 360
Db 1435 GTTAAGGTTGAATTTCTGGCGCTCTCCCGCATACCCAGGCTGATAGGGGAGTGGGCTCC 1376

Qy 361 AGTGCTGTTATTTAGATGATACTTTGTAAACAAAGCCACAGCCCTCACCTATGACCCC 420
Db 1375 ACTGCTGTTATTTAGATGATACTTTGTAAACAAAGCCACAGCCCTTAACCTATGACCCA 1316

Qy 421 TATGTAACACTACTCTCCCGCATACATTAACCCAGCCCTTCTCCTACCACTCCCGGTAC 480
Db 1315 TATGTAACACTACTCTCCCGCATACATTAACCCAGCCCTTCTCCTACCACTCCCGGTAC 1256

Qy 481 TTTACCCCAACCTGCTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAAGA 540
Db 1255 TTTACCCCAACCTGCTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAAGA 1196

Qy 541 AACCACTGTGGCTGAGACTACAACTGCTGGAATGTAGACAGTGGGCTCGGCCT 600
Db 1195 AACCACTGTGGCTGAGACTACAACTGCTGGAATGTAGACAGTGGGCTCGGCCT 1136

Qy 601 GCGTTCGAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACATGTATGACAA 660
Db 1135 GCGTTCGAAACAGTATATAGCAGCAGGAATACAAATATCCGTGTAAACATGTATGACAA 1076

Qy 661 TTCAGAGAAATTAATTTTAAAGACCCCGCCACTTAAACCCCTTAA 702
Db 1075 TTCAGAGAAATTAATTTTAAAGACCCCGCCACTTAAACCCCTTAA 1034

RESULT 7

AAF75840/C
ID AAF75840 standard; DNA; 1768 BP.

XX

```

AC AAF5840;
XX
XX 18-MAY-2001 (first entry)
XX
XX PCV DNA fragment of Imp 1103 strain.
XX
XX Vaccine; pig; myocarditis; abortion; intrauterine infection;
XX multisystemic wasting syndrome; ds.
XX
XX OS Porcine circovirus-2.
XX
XX PN WO200116330-A2.
XX
XX PD 08-MAR-2001.
XX
XX PF 28-AUG-2000; 2000WO-EP08781.
XX
XX PR 31-AUG-1999; 99US-0151564.
XX
XX PR 31-MAY-2000; 2000US-0583350.
XX
XX PA (MERI-) MERIAL.
XX
XX PA (UYSA-) UNIV SASKATCHEWAN.
XX
XX PA (UYBE-) UNIV QUEENS BELFAST.
XX
XX PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
XX PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
XX PI Mcneilly F;
XX
XX DR WPI; 2001-244408/25.
XX
XX
XX PT Use of porcine circovirus-2 immunogen to formulate a vaccine
XX PT composition to treat pigs against myocarditis, abortion, intrauterine
XX PT infection and/or post-weaning, multisystemic wasting syndrome
XX PT associated with PCV-2
XX
XX PS Claim 10; Fig 6 #2; 134pp; English.
XX
XX CC The present invention relates to the use of porcine circovirus-2 (PCV-2)
XX CC immunogen to formulate a vaccine composition to prevent or treat pigs
XX CC against myocarditis and/or abortion and/or intrauterine infection and/or
XX CC post-weaning, multisystemic wasting syndrome and other pathological
XX CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
XX CC a strain of PCV, which was used in the present invention.
XX
XX SQ Sequence 1768 BP; 450 A; 360 C; 496 G; 460 T; 2 other;

Query Match 87.2%; Score 612.4; DB 22; Length 1768;
Best Local Similarity 92.0%; Pred. NO. 7e-175;
Matches 646; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 ATGACGTATCAAGAGGCGTTACCGAAGAGAGACACCGCCCGCAGCCATCTTGGC 60
DB 1735 ATGACATATCAAGAGGCGTTACCGAAGAGAGACACCGCCCGCAGCCATCTTGGC 1676
QY 61 CAGATCTCTCCCGCGCCCTGGCTGCTCCACCCCGCCACCGTTACCGTGGAGAAGG 120
DB 1675 CAGATCTCTCCCGCGCCCTGGCTGCTCCACCCCGCCACCGTACCGTGGAGAAGG 1616
QY 121 AAAAATGCACTTTCAACACCCCGCTCTCCCGCACCTTCGGATATPACTCTCAAGCGAAC 180
DB 1615 AAAAATGCACTTTCAACACCCCGCTCTCCCGCACCTTCGGATATPACTCTCAAGCGTACC 1556
QY 181 ACAGTCAGACCGCTCTCTGGCGGTGGACATGATGAGATTCAATATTAATGACTTTCTT 240
DB 1555 ACAGTCAGACCGCTCTCTGGCGGTGGACATGATGAGATTAAATTTGACGACTTTGTT 1496
QY 241 CCCCCAGAGGGGTCAAAACCCCGCTCTGCTGCTTGAATCTACTACAGAAATAGAAG 300
DB 1495 CCCCCAGAGGGGTCAAAACCCCGCTCTGCTGCTTGAATCTACTACAGAAATAGAAG 1436
QY 301 GTTAAGGTGAATCTTGCCCTCTGCTCCCGATACCCAGGGGTGACAGGGGAGTGGCTCC 360
DB 1435 GTTAAGGTGAATCTTGCCCTCTGCTCCCGATACCCAGGGGTGATAGGGAGTGGCTCC 1376

```

RESULT 8

AAX83755/c

ID AAX83755 standard; DNA: 1786 BP.

XX

AC AAX83755;

XX

DT 27-AUG-1999 (first entry)

XX

DE Porcine circovirus type II 9741 nucleotide sequence.

XX

KW Porcine circovirus type II; PCVII; PCVI; pig; infection; vaccine;

KW postweaning multisystemic wasting syndrome virus; diagnosis; ds.

XX

OS Porcine circovirus.

XX

PN WO9929717-A2.

XX

PD 17-JUN-1999.

XX

PF 11-DEC-1998; 98WO-CA01130.

XX

PR 16-DEC-1997; 97US-0069750.

PR

PR 11-DEC-1997; 97US-0069233.

XX

PA (UYSA-) UNIV SASKATCHEWAN.

XX

PI Babiuk LA, Potter AA, Wang L, Willson P;

XX

XX WPI; 1999-394957/33.

XX

PT New isolated porcine circovirus Type II

XX

PS Claim 1; Fig 4; 82pp; English.

XX

CC The present invention describes a new isolated porcine circovirus

CC Type II (PCVII), obtained from postweaning multisystemic wasting

CC syndrome-affected pigs. AAX83754 to AAX83757 represent PCVII nucleotide

CC sequences. AAY24929 to AAY24934 represent PCVII open reading frame (ORF)

CC proteins (N.B. the PCVII ORFs given in Fig 2A to Fig 2B do not

CC correspond exactly with the PCVII ORFs given in Fig 3A to Fig 3D).

CC The PCVII polypeptides can be used for treating or preventing PCVII

CC infection in vertebrates. The products can also be used to detect the

XX

SQ Sequence 1786 BP; 467 A; 367 C; 481 G; 471 T; 0 other;

XX

Query Match 84.8%; Score 595.6; DB 20; Length 1786;

Db 1702 GTTAAGGTTGAATCTGGCCCTGCTCCCCCATCACCCAGGCGTATAGGGAGTGGGCTCC 1761
Qy 361 AGTCTCTGTTATTTAGATGATACTTTGTAACAAAGGCCACAGCCCTCACCTATGACCCC 420
Db 1762 ACTGCTGTTATTTAGATGATACTTTGTAACAAAGGCCACAGCCCTAACCTATGACCCA 1821
Qy 421 TATGTAACACTACCTCTCCGCCCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 480
Db 1822 TATGTAACACTACCTCTCCGCCCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 1881
Qy 481 TTTACCCCCAAACCTGCTCTAGATTTTTCACATATTGATTCTTCAACCAACAAACAAAGA 540
Db 1882 TTCACACCCAAACCTGCTCTAGATTTTTCACATATTGATTCTTCAACCAACAAACAAAGA 1941
Qy 541 AACCAAGTGTGGCTGAGACTACAAACCTGCTGGAAATGTAGACACGATAGGCGCTCGGCACT 600
Db 1942 AATCAGCTTTGGCTGAGACTACAAACCTGCTGGAAATGTAGACACGATAGGCGCTCGGCGCT 2001
Qy 601 GCCTTCGAAACAGTATATACGACCAAGCAATACCAATATCCGTGTAACCATGTATGTACAA 660
Db 2002 GCCTTCGAAACAGTATATACGACCAAGCAATACCAATATCCGTGTAACCATGTATGTACAA 2061
Qy 661 TTCAGAGAAATTTAATTTTAAAGACCCGCCCTTAAACCTTAA 702
Db 2062 TTCAGAGAAATTTAATTTTAAAGACCCGCCCTTAAACCTTAA 2103

RESULT 3
AAF75830/c
ID AAF75830 standard; DNA; 2769 BP.
AC AAF75830;
XX
DT 18-MAY-2001 (first entry)
XX
XX Plasmid pJP107 DNA fragment.
XX
XX ALVAC; porcine circovirus-2; vaccine; pig; myocarditis; abortion;
KW intrauterine infection; multisystemic wasting syndrome; ds.
XX
XX Unidentified.
XX
XX WO200116330-A2.
XX
XX 08-MAR-2001.
XX
XX 28-AUG-2000; 2000WO-EP08781.
XX
XX 31-AUG-1999; 99US-0151564.
XX
XX 31-MAY-2000; 2000US-0583350.
XX
XX (MERI-) MERIAL.
PA (UYSA-) UNIV SASKATCHEWAN.
PA (UYBE-) UNIV QUEENS BELFAST.
XX
XX Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
PI Mcneilly F;
XX
XX WPI; 2001-244408/25.
DR P-PSDB; AAB73273.
XX
XX Use of porcine circovirus-2 immunogen to formulate a vaccine
PT composition to treat pigs against myocarditis, abortion, intrauterine
PT infection and/or post-weaning, multisystemic wasting syndrome
PT associated with PCV-2 -
XX
XX Example 3 #3; Fig 6 #1; 134pp; English.
XX
XX The present invention relates to the use of porcine circovirus-2 (PCV-2)
CC immunogen to formulate a vaccine composition to prevent or treat pigs
CC against myocarditis and/or abortion and/or intrauterine infection and/or
CC post-weaning, multisystemic wasting syndrome and other pathological

CC sequalee associated with PCV-2. The present sequence is a DNA fragment of
CC a plasmid, which expresses gene products of PCV-2.
XX
SQ Sequence 2769 BP; 828 A; 455 C; 538 G; 948 T; 0 other;
Query Match 88.6%; Score 622; DB 22; Length 2769;
Best Local Similarity 92.9%; Pred. No. 1.1e-177;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;
Qy 1 ATGAGCTATCCAAAGGAGGCGTTACGAGAAAGAACACCGCCCGACCCATCTTGGC 60
Db 1898 ATGAGCTATCCAAAGGAGGCGTTACGAGAAAGAACACCGCCCGACCCATCTTGGC 1839
Qy 61 CAGATCTCTCCCGCGCGCCCTGGCTGCTGCACCCCGCCACCGCTTACCGCTGGAGAGG 120
Db 1838 CAGATCTCTCCCGCGCGCCCTGGCTGCTGCACCCCGCCACCGCTTACCGCTGGAGAGG 1779
Qy 121 AAAAATGCATCTTCAACACCCGCTCTCCCGCACCTTCGGATATATCTGTCAGCCGAC 180
Db 1778 AAAAATGCATCTTCAACACCCGCTCTCCCGCACCTTCGGATATATCTGTCAGCCGAC 1719
Qy 181 ACAGTCAGAACGCCCTCTCTGGCGGTGGACATGATGAGATTTCAATTAATGACTTCTT 240
Db 1718 ACAGTCAGAACGCCCTCTCTGGCGGTGGACATGATGAGATTTAAATTTGACGACTTGT 1659
Qy 241 CCCCAGGAGGGGTCACAAACCCCGCTCTGTGCTCTTGAATTAATGACTTGAATTAAG 300
Db 1658 CCCCAGGAGGGGTCACAAACCCCGCTCTGTGCTCTTGAATTAATGACTTGAATTAAG 1599
Qy 301 GTTAAGTGTGAATTTCTGGCCCTGCTCCCGGATCACCCAGGTCAGAGGAGTGGCTCC 360
Db 1598 GTTAAGTGTGAATTTCTGGCCCTGCTCCCGGATCACCCAGGTCAGAGGAGTGGCTCC 1539
Qy 361 AGTCTGTTATTTAGATGATAAATTTGTAACAAAGGCCACAGCCCTCACCTATGACCCC 420
Db 1538 ACTGCTGTTATTTAGATGATAAATTTGTAACAAAGGCCACAGCCCTCACCTATGACCCA 1479
Qy 421 TATGTAACACTACTCTCCCGCATACCATTAACCCGCTTCTCTTACCACCTCCCGTAC 480
Db 1478 TATGTAACACTACTCTCCCGCATACCATTAACCCGCTTCTCTTACCACCTCCCGTAC 1419
Qy 481 TTTACCCCAACCTCTCTAGATTTTCACTATTTGATTCTTCAACCAACAAACAAAGA 540
Db 1418 TTTACCCCAACCTCTCTAGATTTTCACTATTTGATTCTTCAACCAACAAACAAAGA 1359
Qy 541 AACCAAGTGTGGCTGAGACTACAAACTGCTGGAATGTAGACACGCTAGGCGCTCGC 600
Db 1358 AATCAGCTTTGGCTGAGACTACAAACCTCTGGAATGTAGACACGCTAGGCGCTCGC 1299
Qy 601 GCGTTGCAAAACAGTATATACGACCAAGGAATCAATATCCGTGTAACCATGTATGTACAA 660
Db 1298 GCGTTGCAAAACAGTATATACGACCAAGGAATCAATATCCGTGTAACCATGTATGTACAA 1239
Qy 661 TTCAGAGAAATTTAATTTTAAAGACCCCGCCCTTAAACCTTAA 702
Db 1238 TTCAGAGAAATTTAATTTTAAAGACCCCGCCCTTAAACCTTAA 1197

RESULT 4
AAF28320/c
ID AAF28320 standard; DNA; 3609 BP.
XX
XX AAF28320;
XX
XX 30-MAR-2001 (first entry)
XX
XX pJP107 donor plasmid for PCV2 ORF2 and ORF1.
XX
KW PCV2; porcine circovirus 2; virucide; immunostimulant; vaccine;
KW postweaning multisystemic wasting syndrome; PMWS; infection;
KW pig pathogen; open reading frame; ORF; ss.
XX
OS Porcine circovirus type 2.

OS Synthetic.
PN WO200077216-A2.
XX
XX
PD 21-DEC-2000.
XX
XX 09-JUN-2000; 2000WO-IB00882.
XX
XX 10-JUN-1999; 99US-0138478.
PR 01-JUN-2000; 2000US-0583545.
XX
XX (MERI-) MERIAL.
XX
XX Bublot M, Perez JM, Charreyre CE;
XX
XX WPI; 2001-080692/09.
DR P-PSDB; AAB61155, AAB61156.
XX
XX Novel recombinant virus comprising DNA from porcine circovirus 2 useful
PT as vaccine for treatment and prophylaxis of porcine circovirus
PT infection, such as postweaning multisystemic wasting syndrome in pigs
PT
XX
XX Example 3; Fig 6; 60pp; English.
XX
XX The present sequence was used in the construction of a recombinant
CC virus comprising DNA from porcine circovirus 2 (PCV2). The
CC recombinant virus is useful as vaccine for treatment and prophylaxis of
CC PCV2 infection, such as postweaning multisystemic wasting syndrome (PMWS)
CC in young pigs.
XX
XX Sequence 3609 BP; 1050 A; 618 C; 737 G; 1204 T; 0 other;

Query Match 88.6%; Score 622; DB 22; Length 3609;
Best Local Similarity 92.9%; Pred. No. 1.2e-177;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;
QY 1 ATGACGTATCCAGGAGCGGTACCGAAGAGAGACACCGCCCGGAGGCATCTTGGC 60
DB 1898 ATGACGTATCCAGGAGCGGTACCGAAGAGAGACACCGCCCGGAGGCATCTTGGC 1839
QY 61 CAGATCTCCCGCGCGCCCTGCTGCTCCACCCCGCCACCGTTACCGTGGAGAAG 120
DB 1838 CAGATCTCCCGCGCGCCCTGCTGCTCCACCCCGCCACCGTTACCGTGGAGAAG 1779
QY 121 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAAGCGAAC 180
DB 1778 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAAGCGTACC 1719
QY 181 ACAGTCAGACCGCCCTCTCGGCGGTGGACATGATGAGATTCAATATTAATGACTTTCTT 240
DB 1718 ACAGTCAGACCGCCCTCTCGGCGGTGGACATGATGAGATTCAATATTAATGAGACTTTGTT 1659
QY 241 CCCCAGGAGGGGTCAAAACCCCGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
DB 1658 CCCCAGGAGGGGTCAAAACCCCGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1599
QY 301 GTTAAGGTGTAATCTGCGCCCTGCTCCCGCATACCCAGGCTGACAGGGAGTGGGCTCC 360
DB 1598 GTTAAGGTGTAATCTGCGCCCTGCTCCCGCATACCCAGGCTGACAGGGAGTGGGCTCC 1539
QY 361 AGTGCTGTTATTTAGATGATACTTTGTAAAGGCCACAGCCCTCACCTATGACCCC 420
DB 1538 ACTGCTGTTATTTAGATGATACTTTGTAAAGGCCACAGCCCTAACCTATGACCCA 1479
QY 421 TATGTAACACTACTCTCCCGCATACCATACCCAGCCCTTCTCTGCTACCATCTCCGGTAC 480
DB 1478 TATGTAACACTACTCTCCCGCATACCATACCCAGCCCTTCTCTGCTACCATCTCCGGTAC 1419
QY 481 TTTACCCCAAAACCTGCTGCTGATTTTCACTATTGATTACTTCCAAACCAAAACAAAGA 540
DB 1418 TTTACCCCAAAACCTGCTGCTGATTTTCACTATTGATTACTTCCAAACCAAAACAAAGA 1359

QY 541 AACAGCCTGTGCTGAGACTACAAACTGCTGGAATGTAGAACACCTAGGCTCGGCACT 600
DB 1358 AATCAGCTTGTGCTGAGACTACAAACTGCTGGAATGTAGAACACCTAGGCTCGGCACT 1299
QY 601 GCGTTGGAACAGTATATACGACCAAGGAATCAATATCGGTGTAACCATGTATGTACAA 660
DB 1298 GCGTTGGAACAGTATATACGACCAAGGAATCAATATCGGTGTAACCATGTATGTACAA 1239
QY 661 TTCAGAGATTTAATTTTAAAGACCCCGCCACCTTAACCCCTTAA 702
DB 1238 TTCAGAGATTTAATTTTAAAGACCCCGCCACCTTAACCCCTTAA 1197
RESULT 5
AA83754/C
ID AA83754 standard: DNA; 1768 BP.
XX
AC AA83754;
XX
XX 27-AUG-1999 (first entry)
XX
DE Porcine circovirus type II 412 nucleotide sequence.
XX
KW Porcine circovirus type II; PCVII; PCVI; pig; infection; vaccine;
KW postweaning multisystemic wasting syndrome virus; diagnosis; ds.
XX
XX Porcine circovirus.
XX
XX WO9929717-A2.
XX
XX 17-JUN-1999.
XX
XX 11-DEC-1998; 98WO-CA01130.
XX
XX 16-DEC-1997; 97US-0069750.
PR 11-DEC-1997; 97US-0069233.
XX
XX (UUSA-) UNIV SASRATCHEWAN.
XX
XX Babiuk LA, Potter AA, Wang L, Willson P;
PI
XX WPI; 1999-394957/33.
XX
XX New isolated porcine circovirus Type II
PT
XX
XX Claim 1; Fig 2; 82pp; English.
XX
XX The present invention describes a new isolated porcine circovirus
CC Type II (PCVII), obtained from postweaning multisystemic wasting
CC syndrome-affected pigs. AA83754 to AA83757 represent PCVII nucleotide
CC sequences. AA24929 to AA24934 represent PCVII open reading frame (ORF)
CC proteins (N.B. the PCVII ORFs given in Fig 2A to Fig 2B do not
CC correspond exactly with the PCVII ORFs given in Fig 3A to Fig 3D).
CC The PCVII polypeptides can be used for treating or preventing PCVII
CC infection in vertebrates. The products can also be used to detect the
CC PCVII.
XX
XX Sequence 1768 BP; 454 A; 361 C; 492 G; 461 T; 0 other;

Query Match 88.4%; Score 620.4; DB 20; Length 1768;
Best Local Similarity 92.7%; Pred. No. 2.6e-177;
Matches 651; Conservative 0; Mismatches 51; Indels 0; Gaps 0;
QY 1 ATGACGTATCCAGGAGCGGTACCGAAGAGAGACACCGCCCGGAGGCATCTTGGC 60
DB 1735 ATGACGTATCCAGGAGCGGTACCGAAGAGAGACACCGCCCGGAGGCATCTTGGC 1676
QY 61 CAGATCTCCCGCGCGCCCTTGGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 120
DB 1675 CAGATCTCCCGCGCGCCCTTGGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 1616
QY 121 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATATACTGTCAAGCGAAC 180

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OM nucleic - nucleic search, using sw model

Run on: May 18, 2003, 09:05:58 ; Search time 251 Seconds
(without alignments)
6298.418 Million cell updates/sec

Title: us-09-514-245b-25

Perfect score: 702

Sequence: 1 atgacgtatccaaaggagcg.....accccccaacttaacccttaa 702

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : N_Geneseq_101002.*

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23: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA2001B.DAT.*
24: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA2002.DAT.*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	622	88.6	2520	22	AAE75827 Plasmid pJP102 DNA
2	622	88.6	2520	22	AAE758317 pJP102 donor plasm
3	622	88.6	2769	22	AAE75830 Plasmid pJP107 DNA
4	622	88.6	3609	22	AAE758320 pJP107 donor plasm
5	620.4	88.4	1768	20	AAE7583754 Porcine circovirus
6	617.2	87.9	1788	22	AAE75841 PCV DNA fragment o
7	612.4	87.2	1768	22	AAE75840 PCV DNA fragment o
8	595.6	84.8	1786	20	AAE7583755 Porcine circovirus
9	590.8	84.2	1361	20	AAE7583757 Porcine circovirus

C 10	381.6	54.4	1767	20	AAE758378	Nucleotide sequenc
C 11	381.6	54.4	1767	20	AAE758378	Nucleotide sequenc
C 12	381.6	54.4	1767	21	AAZ56869	DNA sequence of PC
C 13	381.6	54.4	1767	22	AAE75835	PCV DNA fragment o
C 14	378.4	53.9	1767	20	AAE758359	Nucleotide sequenc
C 15	378.4	53.9	1767	20	AAE758359	Nucleotide sequenc
C 16	378.4	53.9	1767	21	AAE758359	DNA sequence of PC
C 17	378.4	53.9	1767	22	AAE758359	PCV DNA fragment o
C 18	340	48.4	1768	20	AAE758380	Nucleotide sequenc
C 19	340	48.4	1768	20	AAE758380	Nucleotide sequenc
C 20	340	48.4	1768	20	AAE758380	Nucleotide sequenc
C 21	340	48.4	1768	20	AAE758380	Nucleotide sequenc
C 22	340	48.4	1768	21	AAE758380	DNA sequence of PC
C 23	340	48.4	1768	21	AAE758380	DNA sequence of PC
C 24	340	48.4	1768	22	AAE758380	PCV DNA fragment o
C 25	340	48.4	1768	22	AAE758380	PCV DNA fragment o
C 26	339	48.3	1768	20	AAE758382	Nucleotide sequenc
C 27	339	48.3	1768	20	AAE758382	Nucleotide sequenc
C 28	339	48.3	1768	20	AAE758382	Genomic DNA sequen
C 29	311	44.3	1759	20	AAE758593	Nucleotide sequenc
C 30	307.8	43.8	1759	20	AAE758593	Nucleotide sequenc
C 31	273.4	38.9	7460	22	AAH74867	Porcine circovirus
C 32	256.4	36.5	5285	22	AAH74865	Nucleotide sequenc
C 33	256.4	36.5	5650	22	AAH74866	Nucleotide sequenc
C 34	203.6	29.0	1759	20	AAE7583013	Nucleotide sequenc
C 35	199.4	28.4	1759	22	AAE7583013	DNA fragment of PK
C 36	44.6	6.4	4403765	22	AAI99683	Myobacterium tube
C 37	44.6	6.4	4411529	22	AAI99682	Myobacterium tube
C 38	44.4	6.3	953	24	ABQ37014	Oligonucleotide fo
C 39	44.4	6.3	953	24	ABQ37015	Oligonucleotide fo
C 40	44	6.3	1181	23	ABL24269	Drosophila melanog
C 41	44	6.3	4905	23	ABL24268	Drosophila melanog
C 42	43.4	6.2	10348	22	ABA08714	Human Huntington's
C 43	42.6	6.1	592	21	AAZ93361	Sequence encoding
C 44	41.8	6.0	322	18	AAE75508	P. americanus anti
C 45	41.8	6.0	322	21	AAZ49961	Winter flounder li

ALIGNMENTS

RESULT 1
AAE75827
ID AAE75827 standard; DNA; 2520 BP.
XX
AC AAE75827;
XX
DT 18-MAY-2001 (first entry)
XX
DE Plasmid pJP102 DNA fragment.
XX
KW ALVAC; porcine circovirus-2; vaccine; pig; myocarditis; abortion;
KW intrauterine infection; multisystemic wasting syndrome; ds.
XX
OS Unidentified.
XX
PN WO200116330-A2.
XX
PD 08-MAR-2001.
XX
PF 28-AUG-2000; 2000WO-EP08781.
XX
PR 31-AUG-1999; 99US-0151564.
PR 31-MAY-2000; 2000US-0583350.
XX
PA (MERI-) MERIAL.
PA (UYSA-) UNIV SASKATCHEWAN.
XX (UYBE-) UNIV QUEENS BELFAST.
PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
PI Mcneilly F;

DR WPI: 2001-244408/25.
 XX P-PSDB: AAB73272.
 PT Use of porcine circovirus-2 immunogen to formulate a vaccine
 PT composition to treat pigs against myocarditis, abortion, intrauterine
 PT infection and/or post-weaning, multisystemic wasting syndrome
 PT associated with PCV-2
 XX
 XX Example 2 #3; Fig 3 #1; 134pp; English.
 XX
 XX The present invention relates to the use of porcine circovirus-2 (PCV-2)
 CC immunogen to formulate a vaccine composition to prevent or treat pigs
 CC against myocarditis and/or abortion and/or intravertine infection and/or
 CC post-weaning, multisystemic wasting syndrome and other pathological
 CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
 CC a plasmid, which expresses gene products of PCV-2.
 XX
 XX Sequence 2520 BP; 777 A; 482 C; 382 G; 879 T; 0 other;
 SQ

Query Match 88.6%; Score 622; DB 22; Length 2520;
 Best Local Similarity 92.9%; Pred. No. 1e-177;
 Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

QY 1 ATGACGTATCCAGGAGGCGTTACCGAAGAAGAAGACACCGCCCGCAGCCATCTTGGC 60
 DB 1402 ATGACGTATCCAGGAGGCGTTACCGAAGAAGAAGACACCGCCCGCAGCCATCTTGGC 1461
 QY 61 CAGATCTCTCCGCGCCGCTGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 120
 DB 1462 CAGATCTCTCCGCGCCGCTGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 1521
 QY 121 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAACGCAAC 180
 DB 1522 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAACGCAAC 1581
 QY 181 ACAGTCAGACGCGCTCTCTGGCGGTGACATGATGAGATTCATATTAATGACTTTCTT 240
 DB 1582 ACAGTCAGACGCGCTCTCTGGCGGTGACATGATGAGATTCATATTAATGACTTTCTT 1641
 QY 241 CCCCAGGAGGGGTCAACACCCCGCTCTGTGCGCTTGTGAATACTACAGATAAGAAAG 300
 DB 1642 CCCCAGGAGGGGTCAACACCCCGCTCTGTGCGCTTGTGAATACTACAGATAAGAAAG 1701
 QY 301 GTTAAGGTTGAATTTCTGGCGCTGCTCCCGCATCACCGAGGTGACAGGGAGTGGGTCC 360
 DB 1702 GTTAAGGTTGAATTTCTGGCGCTGCTCCCGCATCACCGAGGTGACAGGGAGTGGGTCC 1761
 QY 361 AGTGCTGTTATTTAGATGATACTTTGTACAAAGGCCACAGCCCTACCTATGACCCC 420
 DB 1762 ACTGCTGTTATTTAGATGATACTTTGTACAAAGGCCACAGCCCTAACCTATGACCCA 1821
 QY 421 TATGTAACCTACTCTCCCGCATACCATACCCAGCGCTTCTCTACCACCTCCGGTAC 480
 DB 1822 TATGTAACCTACTCTCCCGCATACCATACCCAGCGCTTCTCTACCACCTCCGGTAC 1881
 QY 481 TTTACCCCAAACTGCTCTAGATTTTCACTATTGATTACTTCCAAACCAACAAAGA 540
 DB 1882 TTTACCCCAAACTGCTCTAGATTTTCACTATTGATTACTTCCAAACCAACAAAGA 1941
 QY 541 AACCAAGTGTGGCTGAGACTACAACTGCTGGAATGTAGACCACTAGGCGCTCGGCACT 600
 DB 1942 AACCAAGTGTGGCTGAGACTACAACTGCTGGAATGTAGACCACTAGGCGCTCGGCACT 2001
 QY 601 CGGTTGAAAACAGTATATACGACCGAGGAATACAAATATCCGTGTAAACCATGTATGACAA 660
 DB 2002 CGGTTGAAAACAGTATATACGACCGAGGAATACAAATATCCGTGTAAACCATGTATGACAA 2061
 QY 661 TTCAGAGAAATTAATTTTAAAGACCCCGCCACTTAACCCCTTAA 702
 DB 2062 TTCAGAGAAATTAATTTTAAAGACCCCGCCACTTAACCCCTTAA 2103

RESULT 2

AAF28317
 ID AAF28317 standard; DNA; 2520 BP.
 XX
 XX AAF28317;
 AC
 XX 30-MAR-2001 (first entry)
 DT
 XX
 XX pJP102 donor plasmid for PCV2 ORF2.
 DE
 XX
 XX PCV2: porcine circovirus 2; virucide; immunostimulant; vaccine;
 KW postweaning multisystemic wasting syndrome; PMWS; Infection;
 KW pig pathogen; open reading frame 2; ORF2; ss.
 XX
 XX Porcine circovirus type 2.
 OS
 XX Synthetic.
 XX
 XX WO200077216-A2.
 PN
 XX
 XX 21-DEC-2000.
 PD
 XX
 XX 09-JUN-2000; 2000WO-IB00882.
 PF
 XX
 XX 10-JUN-1999; 99US-0138478.
 PR
 XX 01-JUN-2000; 2000US-0583545.
 PR
 XX (MERI-) MERIAL.
 PA
 XX
 XX Bublot M, Perez JM, Charreyre CE;
 PI
 XX
 XX WPI: 2001-080692/09.
 DR
 XX P-PSDB; AAB61154.
 XX
 XX Novel recombinant virus comprising DNA from porcine circovirus 2 useful
 PT as vaccine for treatment and prophylaxis of porcine circovirus
 PT infection, such as postweaning multisystemic wasting syndrome in pigs
 PT
 XX
 XX Example 2; Fig 3; 60pp; English.
 PS
 XX
 CC The present sequence was used in the construction of a recombinant
 CC virus comprising DNA from porcine circovirus 2 (PCV2). The
 CC recombinant virus is useful as vaccine for treatment and prophylaxis of
 CC PCV2 infection, such as postweaning multisystemic wasting syndrome (PMWS)
 CC in young pigs.
 CC
 XX
 SQ Sequence 2520 BP; 777 A; 482 C; 382 G; 879 T; 0 other;

Query Match 88.6%; Score 622; DB 22; Length 2520;
 Best Local Similarity 92.9%; Pred. No. 1e-177;
 Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

QY 1 ATGACGTATCCAGGAGGCGTTACCGAAGAAGAAGACACCGCCCGCAGCCATCTTGGC 60
 DB 1402 ATGACGTATCCAGGAGGCGTTACCGAAGAAGAAGACACCGCCCGCAGCCATCTTGGC 1461
 QY 61 CAGATCTCTCCGCGCCGCTGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 120
 DB 1462 CAGATCTCTCCGCGCCGCTGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 1521
 QY 121 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAACGCAAC 180
 DB 1522 AAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATCTGTCAACGCAAC 1581
 QY 181 ACAGTCAGACGCGCTCTCTGGCGGTGACATGATGAGATTCATATTAATGACTTTCTT 240
 DB 1582 ACAGTCAGACGCGCTCTCTGGCGGTGACATGATGAGATTCATATTAATGACTTTCTT 1641
 QY 241 CCCCAGGAGGGGTCAACACCCCGCTCTGTGCGCTTGTGAATACTACAGATAAGAAAG 300
 DB 1642 CCCCAGGAGGGGTCAACACCCCGCTCTGTGCGCTTGTGAATACTACAGATAAGAAAG 1701
 QY 301 GTTAAGGTTGAATTTCTGGCGCTGCTCCCGCATCACCGAGGTGACAGGGAGTGGGTCC 360
 DB 1702 GTTAAGGTTGAATTTCTGGCGCTGCTCCCGCATCACCGAGGTGACAGGGAGTGGGTCC 1761

; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
; FEATURE:
; NAME/KEY: variation
; LOCATION: (1)..(1768)
; OTHER INFORMATION: N represents A or C or G or T
US-09-082-558-6

Query Match 48.3%; Score 339; DB 4; Length 1768;
Best Local Similarity 92.2%; Pred. No. 9.4e-96;
Matches 357; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 316 TGGCCCTGCTCCCGATCACCCAGGTCACAGGGAGTGGGCTCCAGTGTGTTATTTA 375
Db 1768 TGGCCCTGCTCCCGATCACCCAGGTCACAGGGAGTGGGCTCCAGTGTGTTATTTA 1709
Qy 376 GATGATAACTTTGTAAACAAAGGCCACAGCCCTACCTATGACCCCTATGTAACCTACTCC 435
Db 1708 GATGATAACTTTGTAAACAAAGGCCACAGCCCTACCTATGACCCCTATGTAACCTACTCC 1649
Qy 436 TCCGCCATACCAATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAAACT 495
Db 1648 TCCGCCATACCAATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAAACT 1589
Qy 496 GTCTAGATTTCATATTGATTCTCCAAACCAACAAACAAAGAACCACTGTGGCTG 555
Db 1588 GTTCTTGACTCCACTATTGATTCTCCAAACCAACAAACAAAGAACCACTGTGGCTG 1529
Qy 556 AGACTACAAACTGCTGAAATGTAGACACACAGTGGCCCTCGGCACCTGCGTTTCGAAACAGT 615
Db 1528 AGGTACAACTCTAGAATGTGGACACAGTGGCCCTCGGCACCTGCGTTTCGAAACAGT 1469
Qy 616 ATATACGACGAGGAATACAATATCCGTGTACCACTATGTATGATGACAGAAATTTAAT 675
Db 1468 ATATACGACGAGGAATACAATATCCGTGTACCACTATGTATGATGACAGAAATTTAAT 1409
Qy 676 TTTAAAGACCCCTTAAACCTTAA 702
Db 1408 CTTAAAGACCCCTTAAACCTTAA 1382

RESULT 14

US-09-161-092-6/C

; Sequence 6, Application US/09161092

; Patent No. 6391314

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon

; APPLICANT: MEEHAN, Brian

; APPLICANT: CLARK, Edward

; APPLICANT: HAINES, Deborah

; APPLICANT: HARDING, John

; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.

; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC

; FILE REFERENCE: REAGENTS

; CURRENT APPLICATION NUMBER: US/09/161,092

; PRIOR FILING DATE: 1998-09-25

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/082,558

; PRIOR FILING DATE: EARLIER FILING DATE: 1998-05-21

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9800873

; PRIOR FILING DATE: EARLIER FILING DATE: 1998-01-22

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9803707

; PRIOR FILING DATE: EARLIER FILING DATE: 1998-03-20

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 97/12382

; PRIOR FILING DATE: EARLIER FILING DATE: 1997-10-03

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 6
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
; FEATURE:
; NAME/KEY: variation
; LOCATION: (1)..(1768)
; OTHER INFORMATION: N represents A or C or G or T
US-09-161-092-6

Query Match 48.3%; Score 339; DB 4; Length 1768;
Best Local Similarity 92.2%; Pred. No. 9.4e-96;
Matches 357; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 316 TGGCCCTGCTCCCGATCACCCAGGTCACAGGGAGTGGGCTCCAGTGTGTTATTTA 375
Db 1768 TGGCCCTGCTCCCGATCACCCAGGTCACAGGGAGTGGGCTCCAGTGTGTTATTTA 1709
Qy 376 GATGATAACTTTGTAAACAAAGGCCACAGCCCTACCTATGACCCCTATGTAACCTACTCC 435
Db 1708 GATGATAACTTTGTAAACAAAGGCCACAGCCCTACCTATGACCCCTATGTAACCTACTCC 1649
Qy 436 TCCGCCATACCAATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAAACT 495
Db 1648 TCCGCCATACCAATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAAACT 1589
Qy 496 GTCTAGATTTCATATTGATTCTCCAAACCAACAAACAAAGAACCACTGTGGCTG 555
Db 1588 GTTCTTGACTCCACTATTGATTCTCCAAACCAACAAACAAAGAACCACTGTGGCTG 1529
Qy 556 AGACTACAAACTGCTGAAATGTAGACACACAGTGGCCCTCGGCACCTGCGTTTCGAAACAGT 615
Db 1528 AGGTACAACTCTAGAATGTGGACACAGTGGCCCTCGGCACCTGCGTTTCGAAACAGT 1469
Qy 616 ATATACGACGAGGAATACAATATCCGTGTACCACTATGTATGATGACAGAAATTTAAT 675
Db 1468 ATATACGACGAGGAATACAATATCCGTGTACCACTATGTATGATGACAGAAATTTAAT 1409
Qy 676 TTTAAAGACCCCTTAAACCTTAA 702
Db 1408 CTTAAAGACCCCTTAAACCTTAA 1382

RESULT 15

US-09-267-177-24

; Sequence 24, Application US/09267177

; Patent No. 6287856

; GENERAL INFORMATION:

; APPLICANT: Poet, Steven E.

; APPLICANT: Ritchie, Branson W.

; APPLICANT: Niagro, Frank D.

; APPLICANT: Lukeit, Phil D.

; TITLE OF INVENTION: Vaccines against Circovirus Infections

; FILE REFERENCE: 21099.0057

; CURRENT APPLICATION NUMBER: US/09/267,177

; EARLIER FILING DATE: 1999-03-12

; EARLIER APPLICATION NUMBER: 60/077,890

; EARLIER FILING DATE: 1998-03-13

; NUMBER OF SEQ ID NOS: 41

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 24

; LENGTH: 699

; TYPE: DNA

; ORGANISM: porcine circovirus

US-09-267-177-24

Query Match 43.8%; Score 307.8; DB 4; Length 699;
Best Local Similarity 67.0%; Pred. No. 3e-86;
Matches 470; Conservative 0; Mismatches 222; Indels 9; Gaps 2;

Qy 1 ATGAGCTATCCAGGAGGCGTTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 60
Db 1 ATGAGCTGCGCAAGGAGGCGTTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 60

Db 1408 TCTTAAAGACCCCTTAAACCTTAA 1381

RESULT 9

US-09-082-558-3/c
; Sequence 3, Application US/09082558A
; Patent No. 6368601

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.

; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC

; FILE REFERENCE: ALLAN

; CURRENT APPLICATION NUMBER: US/09/082,558A

; CURRENT FILING DATE: 1998-05-21

; EARLIER APPLICATION NUMBER: FR 9800873

; EARLIER FILING DATE: 1998-01-22

; EARLIER APPLICATION NUMBER: FR 9803707

; EARLIER FILING DATE: 1998-03-20

; EARLIER APPLICATION NUMBER: FR 97/12382

; EARLIER FILING DATE: 1997-10-03

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 3

; LENGTH: 1768

; TYPE: DNA

; ORGANISM: Porcine circovirus

US-09-082-558-3

Query Match 48.4%; Score 340; DB 4; Length 1768;

Best Local Similarity 92.3%; Pred. No. 4.6e-96;

Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 315 CTGGCCCTGCTCCCGGATCACCCAGGCTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 374

Db 1768 CTGGCCCTGCTCCCGGATCACCCAGGCTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 1709

QY 375 AGATGATAACTTTTGTAAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434

Db 1708 AGATGATAACTTTTGTAAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1649

QY 435 CTCCCGGCATACCATACCCAGCCCTTCTCTACACCTCCCGGTACTTTACCCCAACACC 494

Db 1648 CTCCCGGCATACCATACCCAGCCCTTCTCTACACCTCCCGGTACTTTACCCCAACACC 1589

QY 495 TGTCCTAGATTCTTCAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 554

Db 1588 TGTCCTAGATTCTTCAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1529

QY 555 GAGACTACAACTCTGGAATGTAGACACCTAGGCGCTCGGCCTCGGCTTCAACAAAGGCGCACAG 614

Db 1528 GAGACTACAACTCTGGAATGTAGACACCTAGGCGCTCGGCCTCGGCTTCAACAAAGGCGCACAG 1469

QY 615 TATATACGACGAGGATACATATCCGTGTAAACCATGTATGTAACACTTCAAGAAATTTAA 674

Db 1468 TATATACGACGAGGATACATATCCGTGTAAACCATGTATGTAACACTTCAAGAAATTTAA 1409

QY 675 TTTTAAAGACCCCTTAAACCTTAA 702

Db 1408 TCTTAAAGACCCCTTAAACCTTAA 1381

RESULT 10

US-09-082-558-4/c

; Sequence 4, Application US/09082558A

; Patent No. 6368601

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.

; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC

; FILE REFERENCE: ALLAN

; CURRENT APPLICATION NUMBER: US/09/082,558A

; CURRENT FILING DATE: 1998-05-21

; EARLIER APPLICATION NUMBER: FR 9800873

; EARLIER FILING DATE: 1998-01-22

; EARLIER APPLICATION NUMBER: FR 9803707

; EARLIER FILING DATE: 1998-03-20

; EARLIER APPLICATION NUMBER: FR 97/12382

; EARLIER FILING DATE: 1997-10-03

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 4

; LENGTH: 1768

; TYPE: DNA

; ORGANISM: Porcine circovirus

US-09-082-558-4

Query Match 48.4%; Score 340; DB 4; Length 1768;

Best Local Similarity 92.3%; Pred. No. 4.6e-96;

Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 315 CTGGCCCTGCTCCCGGATCACCCAGGCTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 374

Db 1768 CTGGCCCTGCTCCCGGATCACCCAGGCTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 1709

QY 375 AGATGATAACTTTTGTAAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434

Db 1708 AGATGATAACTTTTGTAAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1649

QY 435 CTCCCGGCATACCATACCCAGCCCTTCTCTACACCTCCCGGTACTTTACCCCAACACC 494

Db 1648 CTCCCGGCATACCATACCCAGCCCTTCTCTACACCTCCCGGTACTTTACCCCAACACC 1589

QY 495 TGTCCTAGATTCTTCAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 554

Db 1588 TGTCCTAGATTCTTCAACAAAGGCGCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1529

QY 555 GAGACTACAACTCTGGAATGTAGACACCTAGGCGCTCGGCCTCGGCTTCAACAAAGGCGCACAG 614

Db 1528 GAGACTACAACTCTGGAATGTAGACACCTAGGCGCTCGGCCTCGGCTTCAACAAAGGCGCACAG 1469

QY 615 TATATACGACGAGGATACATATCCGTGTAAACCATGTATGTAACACTTCAAGAAATTTAA 674

Db 1468 TATATACGACGAGGATACATATCCGTGTAAACCATGTATGTAACACTTCAAGAAATTTAA 1409

QY 675 TTTTAAAGACCCCTTAAACCTTAA 702

Db 1408 TCTTAAAGACCCCTTAAACCTTAA 1381

RESULT 11

US-09-161-092-3/c

; Sequence 3, Application US/09161092

; Patent No. 6391314

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward

; APPLICANT: HAINES, Deborah

; APPLICANT: HASSARD, Lori

; APPLICANT: HARDING, John

; APPLICANT: CHARREYRE, Catherine E.

APPLICANT: CHAPPUIS, Gilles E.
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/161,092
; CURRENT FILING DATE: 1998-09-25
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/082,558
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-05-21
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-161-092-3

Query Match 48.4%; Score 340; DB 4; Length 1768;
Best Local Similarity 92.3%; Pred. No. 4.6e-96;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 315 CTGGCCCTGCTCCCGGATCACCCAGGGTGACAGGGGAGTGCGCTCCAGTGCTGTTATTTT 374
Db 1768 CTGGCCCTGCTCCCGGATCACCCAGGGTGATAGGGGAGTGCGCTCCAGTGCTGTTATTTT 1709

Qy 375 AGATGATAAATTTGTGAACAAAGGGCCACAGCCCTCACCTATGACCCCTATGAACTACTC 434
Db 1708 AGATGATAAATTTGTGAACAAAGGGCCACAGCCCTAACCTATGACCATATGAACTACTC 1649

Qy 435 CTCGGCCATACCATTAACCCAGCCCTTCTCTACCACCTCCCGGTACTTTACCCCAACC 494
Db 1648 CTCGGCCATACCATTAACCCAGCCCTTCTCTACCACCTCCCGGTACTTTACCCCAACC 1589

Qy 495 TGCTCTAGATTTCACCTATTGATTACTTCCAACCAACAAACAAAGAAAGAGAGCTGTGGCT 554
Db 1588 TGTTCTGACTCCACTATTGATTACTTCCAACCAACAAACAAAGAGATCAGCTTTGGCT 1529

Qy 555 GAGACTACAACTGCTGGAATGTAGACCACTAGGCGCTCGGCATGCTGCGTTCGAAACAG 614
Db 1528 GAGGCTACAACTCTAGAAATGTGGACCACTAGGCGCTCGGCATGCTGCGTTCGAAACAG 1469

Qy 615 TATATACGACGAGGATACATATCCGTGTACCATGTATGTACAAATTCAGAGAAATTTAA 674
Db 1468 TATATACGACGAGGATACATATCCGTGTACCATGTATGTACAAATTCAGAGAAATTTAA 1409

Qy 675 TTTTAAAGACCCCCACTTAACCCCTAA 702
Db 1408 TCTTAAAGACCCCCACTTAACCCCTAA 1381

RESULT 12
US-09-161-092-4/C
; Sequence 4, Application US/09161092
; Patent No. 6391314
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.
; APPLICANT: CHAPPUIS, Gilles E.
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/161,092
; CURRENT FILING DATE: 1998-09-25

RESULT 13
US-09-082-558-6/C
; Sequence 6, Application US/09082558A
; Patent No. 6386601
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.
; APPLICANT: CHAPPUIS, Gilles E.
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/082,558A
; CURRENT FILING DATE: 1998-05-21
; EARLIER APPLICATION NUMBER: FR 9800873
; EARLIER FILING DATE: 1998-01-22
; EARLIER APPLICATION NUMBER: FR 9803707
; EARLIER FILING DATE: 1998-03-20
; EARLIER APPLICATION NUMBER: FR 97/12382
; EARLIER FILING DATE: 1997-10-03

APPLICANT: CHAPPUIS, Gilles E.
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/161,092
; CURRENT FILING DATE: 1998-09-25
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/082,558
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-05-21
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-161-092-4

Query Match 48.4%; Score 340; DB 4; Length 1768;
Best Local Similarity 92.3%; Pred. No. 4.6e-96;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 315 CTGGCCCTGCTCCCGGATCACCCAGGGTGACAGGGGAGTGCGCTCCAGTGCTGTTATTTT 374
Db 1768 CTGGCCCTGCTCCCGGATCACCCAGGGTGATAGGGGAGTGCGCTCCAGTGCTGTTATTTT 1709

Qy 375 AGATGATAAATTTGTGAACAAAGGGCCACAGCCCTCACCTATGACCCCTATGAACTACTC 434
Db 1708 AGATGATAAATTTGTGAACAAAGGGCCACAGCCCTAACCTATGACCATATGAACTACTC 1649

Qy 435 CTCGGCCATACCATTAACCCAGCCCTTCTCTACCACCTCCCGGTACTTTACCCCAACC 494
Db 1648 CTCGGCCATACCATTAACCCAGCCCTTCTCTACCACCTCCCGGTACTTTACCCCAACC 1589

Qy 495 TGCTCTAGATTTCACCTATTGATTACTTCCAACCAACAAACAAAGAAAGAGAGCTGTGGCT 554
Db 1588 TGTTCTGACTCCACTATTGATTACTTCCAACCAACAAACAAAGAGATCAGCTTTGGCT 1529

Qy 555 GAGACTACAACTGCTGGAATGTAGACCACTAGGCGCTCGGCATGCTGCGTTCGAAACAG 614
Db 1528 GAGACTACAACTCTGGAATGTAGACCACTAGGCGCTCGGCATGCTGCGTTCGAAACAG 1469

Qy 615 TATATACGACGAGGATACATATCCGTGTACCATGTATGTACAAATTCAGAGAAATTTAA 674
Db 1468 TATATACGACGAGGATACATATCCGTGTACCATGTATGTACAAATTCAGAGAAATTTAA 1409

Qy 675 TTTTAAAGACCCCCACTTAACCCCTAA 702
Db 1408 TCTTAAAGACCCCCACTTAACCCCTAA 1381

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OM nucleic - nucleic search, using sw model

Run on: May 18, 2003, 11:03:33 ; Search time 55 Seconds
(without alignments)
3914.311 Million cell updates/sec

Title: US-09-514-245B-25
Perfect score: 702
Sequence: 1 atgacgtatccaggagcg.....acccccacttaacccttaa 702

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- 2: /cgn2_6/ptodata/1/ina/5B-COMB.seq.*
- 3: /cgn2_6/ptodata/1/ina/6A-COMB.seq.*
- 4: /cgn2_6/ptodata/1/ina/6B-COMB.seq.*
- 5: /cgn2_6/ptodata/1/ina/PCFUS-COMB.seq.*
- 6: /cgn2_6/ptodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	381.6	54.4	1767	4	US-09-347-594-1 Sequence 1, Appli
C 2	381.6	54.4	1767	4	US-09-082-558-1 Sequence 1, Appli
C 3	381.6	54.4	1767	4	US-09-161-092-1 Sequence 1, Appli
C 4	378.4	53.9	1767	4	US-09-347-594-2 Sequence 2, Appli
C 5	378.4	53.9	1767	4	US-09-082-558-2 Sequence 2, Appli
C 6	378.4	53.9	1767	4	US-09-161-092-2 Sequence 2, Appli
C 7	340	48.4	1768	4	US-09-347-594-3 Sequence 3, Appli
C 8	340	48.4	1768	4	US-09-347-594-4 Sequence 4, Appli
C 9	340	48.4	1768	4	US-09-082-558-3 Sequence 3, Appli
C 10	340	48.4	1768	4	US-09-082-558-4 Sequence 4, Appli
C 11	340	48.4	1768	4	US-09-161-092-3 Sequence 3, Appli
C 12	340	48.4	1768	4	US-09-161-092-4 Sequence 4, Appli
C 13	339	48.3	1768	4	US-09-082-558-6 Sequence 6, Appli
C 14	339	48.3	1768	4	US-09-161-092-6 Sequence 6, Appli
C 15	307.8	43.8	699	4	US-09-267-177-24 Sequence 24, Appli
C 16	307.8	43.8	1727	4	US-09-267-177-2 Sequence 2, Appli
C 17	307.8	43.8	1759	4	US-09-267-177-38 Sequence 38, Appli
C 18	307.8	43.8	1759	4	US-09-267-177-40 Sequence 40, Appli
C 19	303.2	43.2	687	4	US-09-267-177-25 Sequence 25, Appli
C 20	299	42.6	1674	4	US-09-267-177-1 Sequence 1, Appli
C 21	199.4	28.4	1759	4	US-09-347-594-5 Sequence 5, Appli
C 22	199.4	28.4	1759	4	US-09-082-558-5 Sequence 5, Appli
C 23	199.4	28.4	1759	4	US-09-161-092-5 Sequence 5, Appli
C 24	172.2	24.5	285	4	US-09-267-177-22 Sequence 22, Appli
C 25	44.6	6.4	4403765	4	US-09-103-840A-2 Sequence 2, Appli
C 26	44.6	6.4	4411529	4	US-09-103-840A-1 Sequence 1, Appli
C 27	41.8	6.0	322	4	US-09-117-121-41 Sequence 41, Appli

ALIGNMENTS

RESULT 1

US-09-347-594-1/c
; Sequence 1, Application US/09347594
; Patent No. 6217883

GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.

; APPLICANT: MEEHAN, Brian M.

; APPLICANT: ELLIS, John A.

; APPLICANT: KRAKOWKA, George S.

; APPLICANT: AUDONNET, Jean-Christophe F.

; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE

; FILE REFERENCE: 454313-2338

; CURRENT APPLICATION NUMBER: US/09/347,594

; CURRENT FILING DATE: 1999-07-01

; EARLIER APPLICATION NUMBER: 98 08777

; EARLIER FILING DATE: 1998-07-06

; NUMBER OF SEQ ID NOS: 5

; SOFTWARE: Patent Ver. 2.1

; SEQ ID NO 1

; LENGTH: 1767

; TYPE: DNA

; ORGANISM: Porcine circovirus

US-09-347-594-1

Query Match 54.4%; Score 381.6; DB 4; Length 1767;
Best Local Similarity 99.0%; Pred. No. 5e-109;
Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY	315	CTGGCCCTCTCCCGATCACCAGGTCACAGGGAGTGGGCTCCAGTCTGTTATTTT	374
DB	1767	CTGGCCCTCTCCCGATCACCAGGTCACAGGGAGTGGGCTCCAGTCTGTTATTTT	1708
QY	375	AGATGATACTTTGTAAACAAAGCCACAGCCCTACCTATGACCCCTATCTAACTACTC	434
DB	1707	AGATGATACTTTGTAAACAAAGCCACAGCCCTACCTATGACCCCTATCTAACTACTC	1648
QY	435	CTCCCGCCATACCATTAACCCAGCCCTTCTCTACCACTCCCGGTACTTTTACCCCAACCC	494
DB	1647	CTCCCGCCATACCATTAACCCAGCCCTTCTCTACCACTCCCGGTACTTTTACCCCAACCC	1588
QY	495	TGTCTTAGATTTTCTATTGATTTACTTCCAAACAAACAAAGAACAGCTGTGGCT	554
DB	1587	TGTCTTAGATTTTCTATTGATTTACTTCCAAACAAACAAAGAACAGCTGTGGCT	1528
QY	555	GAGACTACAACTGCTTGGAAATGTAGACCACGTAGGCTCGGCCTCGCTTCGAAACAG	614
DB	1527	GAGACTACAACTGCTTGGAAATGTAGACCACGTAGGCTCGGCCTCGCTTCGAAACAG	1468
QY	615	TATATACGACACAGGAATACAATATCGTGTAAACCTGTATGTACAAATTCAGACAAATTA	674

Db 1467 TATATACAGCAGGAAATACATATATCCGTGTACCAATGTATGTACAAATTCAGAGAATTTAA 1408

Qy 675 TTTTAAAGACCCCCACCTTAACCCCTTAA 702

Db 1407 TCTTAAAGACCCCCACCTTAACCCCTTAA 1380

RESULT 2

US-09-082-558-1/c

; Sequence 1, Application US/09082558A

; Patent No. 6368601

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon

; APPLICANT: MEEHAN, Brian

; APPLICANT: CLARK, Edward

; APPLICANT: HAINES, Deborah

; APPLICANT: HASSARD, Lori

; APPLICANT: HARDING, John

; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.

; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC

; FILE REFERENCE: ALLAN

; CURRENT APPLICATION NUMBER: US/09/082,558A

; CURRENT FILING DATE: 1998-05-21

; EARLIER APPLICATION NUMBER: FR 9800873

; EARLIER FILING DATE: 1998-01-22

; EARLIER APPLICATION NUMBER: FR 9803707

; EARLIER FILING DATE: 1998-03-20

; EARLIER APPLICATION NUMBER: FR 97/12382

; EARLIER FILING DATE: 1997-10-03

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 1

; LENGTH: 1767

; TYPE: DNA

; ORGANISM: Porcine circovirus

US-09-082-558-1

Query Match 54.4%; Score 381.6; DB 4; Length 1767;

Best Local Similarity 99.0%; Pred. No. 5e-109;

Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 315 CTGCCCTGCTCCCGGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 374

Db 1767 CTGCCCTGCTCCCGGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTCT 1708

Qy 375 AGATGATAAATTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 434

Db 1707 AGATGATAAATTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 1648

Qy 435 CTCCCGGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAACAC 494

Db 1647 CTCCCGGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAACAC 1588

Qy 495 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAACACCAAGTGTGGCT 554

Db 1587 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAACACCAAGTGTGGCT 1528

Qy 555 GAGACTACAACTGCTGGAAATGTAGACCACTAGGCGCTCGGCAGTGGTTCGAAAACAG 614

Db 1527 GAGACTACAACTGCTGGAAATGTAGACCACTAGGCGCTCGGCAGTGGTTCGAAAACAG 1468

Qy 615 TATATACGACGAGGAATACAAATATCCGTGTACCAATGTATGTACAAATTCAGAGAATTTAA 674

Db 1467 TATATACGACGAGGAATACAAATATCCGTGTACCAATGTATGTACAAATTCAGAGAATTTAA 1408

Qy 675 TTTTAAAGACCCCCACCTTAACCCCTTAA 702

Db 1407 TCTTAAAGACCCCCACCTTAACCCCTTAA 1380

RESULT 3

US-09-082-558-1/c

; Sequence 1, Application US/09082558A

; Patent No. 6368601

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon

; APPLICANT: MEEHAN, Brian M.

; APPLICANT: CLARK, Edward

; APPLICANT: HAINES, Deborah

; APPLICANT: HASSARD, Lori

; APPLICANT: HARDING, John

; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.

US-09-161-092-1/c

; Sequence 1, Application US/09161092

; Patent No. 6391314

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon

; APPLICANT: MEEHAN, Brian

; APPLICANT: CLARK, Edward

; APPLICANT: HAINES, Deborah

; APPLICANT: HASSARD, Lori

; APPLICANT: HARDING, John

; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.

; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC

; FILE REFERENCE: ALLAN

; CURRENT APPLICATION NUMBER: US/09/161,092

; CURRENT FILING DATE: 1998-09-25

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/082,558

; PRIOR FILING DATE: 1998-05-21

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9800873

; PRIOR FILING DATE: 1998-01-22

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 9803707

; PRIOR FILING DATE: 1998-03-20

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: FR 97/12382

; PRIOR FILING DATE: 1997-10-03

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 1

; LENGTH: 1767

; TYPE: DNA

; ORGANISM: Porcine circovirus

US-09-161-092-1

Query Match 54.4%; Score 381.6; DB 4; Length 1767;

Best Local Similarity 99.0%; Pred. No. 5e-109;

Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 315 CTGCCCTGCTCCCGGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTT 374

Db 1767 CTGCCCTGCTCCCGGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGTGTTATTTCT 1708

Qy 375 AGATGATAAATTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 434

Db 1707 AGATGATAAATTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 1648

Qy 435 CTCCCGGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAACAC 494

Db 1647 CTCCCGGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTTACCCCAACAC 1588

Qy 495 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAACACCAAGTGTGGCT 554

Db 1587 TGTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAAGAACACCAAGTGTGGCT 1528

Qy 555 GAGACTACAACTGCTGGAAATGTAGACCACTAGGCGCTCGGCAGTGGTTCGAAAACAG 614

Db 1527 GAGACTACAACTGCTGGAAATGTAGACCACTAGGCGCTCGGCAGTGGTTCGAAAACAG 1468

Qy 615 TATATACGACGAGGAATACAAATATCCGTGTACCAATGTATGTACAAATTCAGAGAATTTAA 674

Db 1467 TATATACGACGAGGAATACAAATATCCGTGTACCAATGTATGTACAAATTCAGAGAATTTAA 1408

Qy 675 TTTTAAAGACCCCCACCTTAACCCCTTAA 702

Db 1407 TCTTAAAGACCCCCACCTTAACCCCTTAA 1380

RESULT 4

US-09-347-594-2/c

; Sequence 2, Application US/09347594

; Patent No. 6217883

; GENERAL INFORMATION:

; APPLICANT: ALLAN, Gordon M.

; APPLICANT: MEEHAN, Brian M.


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/db_xref="taxon:7227"
/clone="GH27112"
/clone_lib="GH Drosophila melanogaster head pOT2"
/sex="male and female"
/dev_stage="adult"
/lab_host="DH5 - alpha"
/notes="Organ: head; Vector: pOT2; Site_1: EcoRI; Site_2:
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pOT2. Plasmid cDNA library."
BASE COUNT      74 a 110 c 244 g 133 t
ORIGIN

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Best Local Similarity 58.5%; Pred. NO. 0.12;
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QY 92 ACCCCGCCACCGTTACCGCTGGAGAGGAAATGGCATCTTCAACACCGCCCTCTCC 151
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Db 500 AGGCCGCCACCGATTCCGCTACCTCCACAGATGGCCACCTCCACCGCGGATTCGCC 441
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QY 152 GCACCTTCGGATATA 166
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```

```

RESULT 2
CNS00CNG
LOCUS
DEFINITION
Drosophila melanogaster genome survey sequence TET3 end of BAC #
BACR26H16 of RPCI-98 library from Drosophila melanogaster (fruit
fly), genomic survey sequence.
ACCESSION
AL059400.1 GI:4946964
VERSION
GSS.
KEYWORDS
Drosophila melanogaster.
SOURCE
Drosophila melanogaster.
ORGANISM
Drosophila melanogaster.
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 939)
Genoscope.
REFERENCE
Direct Submission
Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
- Web : www.genoscope.cns.fr)
Determination of this BAC-end sequence was carried out as part of a
collaboration with the Berkeley Drosophila Genome Project (BDGP).
The BDGP is constructing a physical map of the Drosophila
melanogaster genome using these BACs. For further information
please see http://www.fruitfly.org The BDGP Drosophila
melanogaster BAC library was prepared by Kazutoyo Osoegawa and
Aaron Mammoser in Pieter de Jong's laboratory in the Department of
Cancer Genetics at the Roswell Park Cancer Institute in Buffalo,
NY. The library is named RPCI-98 and was constructed by partial
EcoRI digestion of Drosophila DNA provided by the BDGP from the
isogenic strain y2; cn bw sp, the same strain used for the BDGP's
p1 and EST libraries. A more detailed description of the library
and how to order individual BAC clones, the entire library, or
filters for hybridization from the BACPAC Resource Center can be
found at http://bacpac.med.buffalo.edu/drosophila\_bac.htm.
Location/Qualifiers
1. 939
/organism="Drosophila melanogaster"
/db_xref="taxon:7227"
/clone="BACR26H16"
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ORIGIN

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Query Match      6.4%; Score 44.6; DB 17; Length 939;
Best Local Similarity 18.1%; Pred. NO. 0.23;
Matches 56; Conservative 122; Mismatches 131; Indels 0; Gaps 0;

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QY 511 ATTGATTACTTCAACCAACAAACAAAGAAACAGCTGTGGCTGAGACTACAACTGCT 570
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 394 MMHMMMMMTTMMHMMMMMMMTTMMHMMMTTMMHMMMTTMMHMMMTTMMHMMMTTMMHMM 453
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QY 571 GGAATGTAGACACCTAGCCCTGGCACTGCTTCGAAACAGTATATACGACCAAGAA 630
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Db 454 MMHMMMMMTTMMHMMMMMTTMMHMMMTTMMHMMMTTMMHMMMTTMMHMMMTTMMHMM 513
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QY 631 TACAATATCCGCTGTAACCATGTATGTACAACTTACAGAGAATTTAATTTTAAAGACCC 690
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QY 691 CTTAACCT 699
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RESULT 3
BI629442/c
LOCUS
DEFINITION
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RH58310.5prime RH Drosophila melanogaster normalized Head pFic-1
Drosophila melanogaster cDNA clone RH58310 5 similar to CG17108;
FBan0017108 GO:[ ] located on: 2L 32A1-32A1; 08/23/2001, mRNA
sequence.
ACCESSION
BI629442
VERSION
BI629442.1 GI:15531652
KEYWORDS
EST.
SOURCE
fruit fly.
ORGANISM
Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 638)
REFERENCE
Stapleton,M., Brokstein,P., Hong,L., Tyler,D., Berman,B., Carlson
,J., Champe,M., Chavez,C., Dorsett,V., Farfan,D., Frise,E., George
,R., Gonzalez,M., Guarin,H., Harris,N., Li,P., Liao,G., Misra,S.,
Mungall,C.J., Nunoo,J., Pacieb,J., Paragas,V., Park,S.,
Phouanavong,S., Wan,K., Yu,C., Lewis,S.E., Celniker,S. and Rubin
,G.M.
BDGP/HIMI RH Drosophila EST Project
Unpublished (2001)
Contact: Stapleton, M.
BDGP
Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/EST\_est@fruitfly.berkeley.edu
hit genomic AE003629; atm:2L [10413221,10674011]
estimated-cyto:31E5-32A5; 08/23/2001
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Location/Qualifiers
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/db_xref="taxon:7227"
/clone="RH58310"
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pFic-1"
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TITLE
BDGP/HIMI RH Drosophila EST Project
JOURNAL
COMMENT
FEATURES
source
Location/Qualifiers
1. 638
/organism="Drosophila melanogaster"
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pFic-1"
/sex="male and female"
/dev_stage="Adult"

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 18, 2003, 10:32:44 ; Search time 1499 Seconds
(without alignments)
7584.544 Million cell updates/sec

Title: US-09-514-245B-25

Perfect score: 702
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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EST:*

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2: em_esthum:**
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5: em_estov:**
6: em_estpl:**
7: em_estro:**
8: em_htc:**
9: gb_est1:**
10: gb_est2:**
11: gb_htc:**
12: gb_est3:**
13: gb_est4:**
14: gb_est5:**
15: em_estfun:**
16: em_estom:**
17: gb_gss:**
18: em_gss_hum:**
19: em_gss_inv:**
20: em_gss_pln:**
21: em_gss_vrt:**
22: em_gss_fun:**
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24: em_gss_mus:**
25: em_gss_other:**
26: em_gss_pro:**
27: em_gss_fod:**

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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C 1	45.4	6.5	561	9	AI514058 GH27112.5
C 2	44.6	6.4	939	17	AI059400 Drosophila
C 3	44.2	6.3	638	13	BI629442 RH58310.5
C 4	44	6.3	445	9	AI292664 GH15617.5
C 5	44	6.3	484	9	AI108264 GH07058.5
C 6	44	6.3	493	9	AI405757 GH25879.5

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C 36	43	6.1	710	12 <td>BI627948 <td>GH14435</td> <td></td> </td>	BI627948 <td>GH14435</td> <td></td>	GH14435	
C 37	42.8	6.1	1064	17 <td>CNS01NGW <td>GH14435</td> <td></td> </td>	CNS01NGW <td>GH14435</td> <td></td>	GH14435	
C 38	42.6	6.1	449	10 <td>AW615354 <td>GH14435</td> <td></td> </td>	AW615354 <td>GH14435</td> <td></td>	GH14435	
C 39	42.6	6.1	494	9 <td>AI141028 <td>GH14435</td> <td></td> </td>	AI141028 <td>GH14435</td> <td></td>	GH14435	
C 40	42.6	6.1	496	9 <td>AI364938 <td>GH14435</td> <td></td> </td>	AI364938 <td>GH14435</td> <td></td>	GH14435	
C 41	42.6	6.1	574	13 <td>BI798844 <td>GH14435</td> <td></td> </td>	BI798844 <td>GH14435</td> <td></td>	GH14435	
C 42	42.6	6.1	575	14 <td>C99980 <td>GH14435</td> <td></td> </td>	C99980 <td>GH14435</td> <td></td>	GH14435	
C 43	42.6	6.1	592	9 <td>AI017603 <td>GH14435</td> <td></td> </td>	AI017603 <td>GH14435</td> <td></td>	GH14435	
C 44	42.6	6.1	657	13 <td>BI561078 <td>GH14435</td> <td></td> </td>	BI561078 <td>GH14435</td> <td></td>	GH14435	
C 45	42.4	6.0	459	9 <td>AU181814 <td>GH14435</td> <td></td> </td>	AU181814 <td>GH14435</td> <td></td>	GH14435	

ALIGNMENTS

RESULT 1
LOCUS AI514058/c
DEFINITION GH27112.5prime GH Drosophila melanogaster head pot2 Drosophila melanogaster cdna clone GH27112 5prime, mRNA sequence.
ACCESSION AI514058
VERSION AI514058.1 GI:4418120
KEYWORDS EST.
SOURCE fruit fly.
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
REFERENCE 1 (bases 1 to 561)
AUTHORS Harvey, D., Brokstein, P., Hong, L., Evans-Holm, M., Su, C., Tsang, G., Lewis, S. and Rubin, G.M.
TITLE BDGP/HMMT Drosophila EST Project
JOURNAL Unpublished (2001)
COMMENT Contact: Stapleton, M.
BDGP
Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: <http://www.fruitfly.org/EST>, est@fruitfly.berkeley.edu
Plate: 271 row: A column: 12
High quality sequence stop: 488.
Location/Qualifiers
1..561
/organism="Drosophila melanogaster"

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ACCESSION      AI405757
VERSION        AI405757.1  GI:4248844
KEYWORDS       EST.
SOURCE         fruit fly.
ORGANISM       Drosophila melanogaster

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 493)
Harvey, D., Brokstein, P., Hong, L., Evans-Holm, M., Su, C., Tsang, G.,
Lewis, S. and Rubin, G.M.
BDGP/HHMI Drosophila EST Project
Unpublished (2001)
Contact: Stapleton, M.
BDGP

Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/EST, est@fruitfly.berkeley.edu
Plate: 258 row: G column: 7
High quality sequence stop: 492.
Location/Qualifiers
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    /organism="Drosophila melanogaster"
    /db_xref="taxon:7227"
    /clone="GH25879"
    /clone_lib="GH Drosophila melanogaster head pot2"
    /sex="male and female"
    /dev_stage="adult"
    /lab_host="DH5 - alpha"
    /note="Organ: head; Vector: pOT2; Site_1: EcoRI; Site_2:
    xhoI; Sized fractionated cDNAs were directly ligated into
    pOT2. Plasmid cDNA library."

BASE COUNT    72 a    91 c    224 g    106 t

ORIGIN
Query Match      6.3%; Score 44; DB 9; Length 493;
Best Local Similarity 58.3%; Pred. No. 0.29;
Matches 77; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

QY  35  GACACCGCCCGCCGAGCATCTTGGCCAGATCTCCGCCGCCGCCCTGGCTGCTCCACC 94
    || || || || || || || || || || || || || || || || || || || ||
Db   332  GATTCCACCGCCTCCACCAGTAATGGCCACCTCCGCCGCCGATTCCGCCACCAATCCAGG 273
    || || || || || || || || || || || || || || || || || || || ||
QY  95   CCGCCCAACCGTTACCGCTGGAGAAGGAAAATATGGCATCTTCAACACCCGCTCTCCCGCA 154
    || || || || || || || || || || || || || || || || || || || ||
Db   272  GCGCCACCAACATCCCGTACTCTCCACAGATGCGCCACCTCCACCGCGATTCCGCCACC 213
    || || || || || || || || || || || || || || || || || || || ||
QY  155  CCTTCGGATATA 166
    || || || || ||
Db   212  TCCTCCGGAATA 201
    || || || || || || || || || || || || || || || || || || || ||

RESULT 7
AI238309/c
LOCUS
DEFINITION
    GH14332.5prime GH Drosophila melanogaster head pot2 Drosophila
    melanogaster cDNA clone GH14332 5prime, mRNA sequence.
ACCESSION      AI238309
VERSION        AI238309.1  GI:383167
KEYWORDS       EST.
SOURCE         fruit fly.
ORGANISM       Drosophila melanogaster

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 497)
Harvey, D., Brokstein, P., Hong, L., Evans-Holm, M., Su, C., Tsang, G.,
Lewis, S. and Rubin, G.M.
BDGP/HHMI Drosophila EST Project
Unpublished (2001)
Contact: Stapleton, M.
BDGP

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[illegible]

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/note="Organ: head; Vector: pOT2; Site_1: EcoRI; Site_2:
XhoI; Sized fractionated cDNAs were directly ligated into
pOT2. Plasmid cDNA library."
73 a 101 c 234 g 124 t
BASE COUNT
ORIGIN

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Query Match	6.3%	Score 44;	DB 9;	Length 532;
Best Local Similarity	58.3%;	Pred. No. 0.29;		
Matches	77;	Conservative 0;	Mismatches 55;	Indels 0; Gaps 0
Qy	35	GACACGCCCGCAGCATCTTCGCCAGATCCTCGCGCGCGCCCTGGCTCGTCGCCACC	94	
Db	433	GATTCCACCGCCTCCACAGATGGCCACCTTCGCGCGCGGATTCGCGCACCAATTCACGG	374	
Qy	95	CCGCGCCACCGTTACCGCTGGAGAGAGAAAATGGCATCTTCAACACCGCGCTCTCCCGCA	154	
Db	373	GCGCGCACCGATTCCGCTACCTCCACAGATGGCCACCTCCACCGCGGATTCGCGCAC	314	
Qy	155	CTTTCGGATATA	166	
Db	313	TCCTCCGGAATA	302	

RESULT	9
AI040106/c	
LOCUS	
DEFINITION	557 bp mRNA linear EST 19-APR-2001 GH23705.5prime GH Drosophila melanogaster head pot2 Drosophila melanogaster cDNA clone GH23705 5prime, mRNA sequence.

VERSION	AI404106.1	GI:4247193
KEYWORDS	EST.	
SOURCE	fruit fly.	
ORGANISM	Drosophila melanogaster	
REFERENCE	Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.	
AUTHORS	1 (bases 1 to 557) Harvey, D., Brokstein, P., Hong, L., Evans-Holm, M., Su, C., Tsang, G., Lewis, S. and Rubin, G. M.	
TITLE	BDGP/HHMI Drosophila EST Project	
JOURNAL	Unpublished (2001)	
COMMENT	Contact: Stapleton, M.	

Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/EST_est@fruitfly.berkeley.edu
Plate: 237 row: A column: 5
High quality sequence stop: 455.

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source
1. .557
/organism="Drosophila melanogaster"
/db_xref="taxon:7227"
/clone="GH23705"
/clone_lib="GH Drosophila melanogaster head pot2"
/sex="male and female"
/dev_stage="adult"
/lab_host="DH5 - alpha"
/notes="Organ: head; Vector: pot2; Site_1: EcoRI; Site_2:
XhoI; Sized fractionated cDNAs were directly ligated into
pot2. Plasmid cDNA library."
87 a 109 c 255 g 106 t
BASE COUNT

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Query Match	6.3%;	Score 44;	DB 9;	Length 557;
Best Local Similarity	58.3%;	Pred. No. 0.3;		
Matches	77;	Conservative	0;	Mismatches 55; Indels 0; Gaps 0;

QY	35	GACACGCCGCCCGACGCCATCTTGGCCAGATCTCCGCCCGCCCGCTGCTGCTCCACC	94
Db	140	GATTCCACGCCCTCCACCGAAATGGCCAGCTCCGCCCGCCGATTCCGCCACCAATACAGG	81
QY	95	CCGCCGCCACCTTTACCGCTGGAGGAAGGAAAAATGCGATCTTTCACACACCGCGCTCTCCGCGCA	154

Db 80 GCGCGCCACCGATTCCGCTACCTCCACGAGAATGGCCACCTCCACCGCGGATTCGCCACC 21

QY 155 CCTTCGGGATATA 166

Db 20 TCCTCCGGGAATA 9

RESULT 10	557 bp	mRNA	linear	EST 19-APR-2001
AI406114/c				
LOCUS	AI406114			
DEFINITION	GH Drosophila melanogaster head pot2 Drosophila melanogaster cDNA clone GH26313 5prime, mRNA sequence.			

VERSION	AI406114.1	GI:4249201
KEYWORDS	EST.	
SOURCE	fruit fly.	
ORGANISM	Drosophila melanogaster	
REFERENCE	Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.	
AUTHORS	1 (bases 1 to 357) Harvey, D., Brokstein, P., Hong, L., Evans-Holm, M., Su, C., Tsang, G., Lewis, S. and Rubin, G.M.	
TITLE	BDGP/HHMI Drosophila EST Project	
JOURNAL	Unpublished (2001)	
COMMENT	Contact: Stapleton, M. bdgp	

FEATURES
 Source
 1. .557
 Location/Qualifiers
 High quality sequence stop: 494.
 Plate: 263 row: B column: 1
 Email: <http://www.fruitfly.org/EST>, est@fruitfly.berkeley.edu
 Fax: 510 486 6798
 One Cyclotron Rd, Berkeley, CA 94720, USA
 Lawrence Berkeley National Lab

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/db_xref="taxon:7227"
/clone="GH26313"
/clone_lib="GH Drosophila melanogaster head pot2"
/sex="male and female"
/dev_stage="adult"
/lab_host="DH5 - alpha"
/note="Organ: head; Vector: pot2; Site_1: EcoRI; Site_2:
XhoI; Sized fractionated cDNAs were directly ligated into
pot2. .Plasmid cDNA library."
74 a 109 C 242 g 132 t

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	Query Match Best Local Similarity Matches	6.3%; 58.3%; 77;	Score 44; Pred. No. 0.3; Conservative	Mismatches 0;	Indels 55;	Gaps 0;
Qy	35	GACACGCCGCCGAGCCATCTTTGGCCAGATCTCTCGCGCGCGCCCTGGCTCGTCACC	94			
Db	557	GATTCCACCGCCTCCACCAAGATGGCCACCTCGCGCGGATTTCCGCACCAATCCAGG	498			
Qy	95	CCGCGCCACGGTTTACCGGCTGGAGAGGAAAATGGCATCTTTCAACACCGCGCTCTCCCGCA	154			
Db	497	GCGCCACCGATTCCCGCTACCTCCACAGAAATGGCCACCTCCACCGCGGATTCGGCCACC	438			

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155 CCTCGGATATA 166
      ||| |||
437 TCCTCCGGAATA 426

RESULT 11
AI238565/C
LOCUS      AI238565      558 bp      mRNA      linear      EST 19-APR-2001
DEFINITION      GH14832.5prime GH Drosophila melanogaster head pOT2 Drosophila
                  melanogaster cDNA clone GH14632 5prime, mRNA sequence.
ACCESSION      AI238565
VERSION        AI238565.1 GI:3833423

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BASE COUNT      74 a 110 c 245 g 132 t
ORIGIN

Query Match      6.3%; Score 44; DB 9; Length 561;
Best Local Similarity 58.3%; Pred. NO. 0.3;
Matches 77; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

QY 35 GACACGCCCGCCGAGCAGATCTTGGCCAGATCTTCGCGCGCGCCCTGGTGTCCACC 94
    || || || || || || || || || || || || || || || || || || || ||
Db 557 GATTCCACCGCCTCCACGAGATGCCACCTCCGCGCGCGATTCGGCCACCAATCCAGG 498

QY 95 CCGGCCACCGTTACCGCTGGAGAGGAATGCAATCTTCAACACCCGCGCTCTCCCGCA 154
    || || || || || || || || || || || || || || || || || || || ||
Db 497 GCGGCCACCGATTCCGTTACCTCCACGAGATGCCACCTCCACCGCGGATTCCGCCACC 438

QY 155 CCTTCGGATATA 166
    | | | | |
Db 437 TCCTCCGGAATA 426

RESULT 14
AI403207/c
LOCUS
DEFINITION GH22602.5prime GH Drosophila melanogaster head pOT2 Drosophila
melanogaster cDNA clone GH22602 5prime, mRNA sequence.
ACCESSION AI403207
VERSION AI403207.1 GI:4246294
KEYWORDS EST.
SOURCE fruit fly.
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 575)
Harvey,D., Brokstein,P., Hong,L., Evans-Holm,M., Su,C., Tsang,G.,
Lewis,S. and Rubin,G.M.
BDGP/HMI Drosophila EST Project
Unpublished (2001)
Contact: Stapleton, M.
BDGP
Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/EST, est@fruitfly.berkeley.edu
Plate: 226 row: A column: 2
High quality sequence stop: 437.

FEATURES
Location/Qualifiers
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/sex="male and female"
/dev_stage="adult"
/lab_host="DH5 - alpha"
/note="Organ: head; Vector: pOT2; Site_1: EcoRI; Site_2:
XhoI; Sized fractionated cDNAs were directly ligated into
pOT2. Plasmid cDNA library."

BASE COUNT      75 a 113 c 250 g 137 t
ORIGIN

Query Match      6.3%; Score 44; DB 9; Length 575;
Best Local Similarity 58.3%; Pred. NO. 0.3;
Matches 77; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

QY 35 GACACGCCCGCCGAGCAGATCTTGGCCAGATCTTCGCGCGCGCCCTGGTGTCCACC 94
    || || || || || || || || || || || || || || || || || || || ||
Db 557 GATTCCACCGCCTCCACGAGATGCCACCTCCGCGCGCGATTCGGCCACCAATCCAGG 498

QY 95 CCGGCCACCGTTACCGCTGGAGAGGAATGCAATCTTCAACACCCGCGCTCTCCCGCA 154
    || || || || || || || || || || || || || || || || || || || ||
Db 497 GCGGCCACCGATTCCGTTACCTCCACGAGATGCCACCTCCACCGCGGATTCCGCCACC 438

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QY 155 CCTTCGGATATA 166
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Db 437 TCCTCCGGAATA 426

RESULT 15
AI516823/c
LOCUS
DEFINITION GH27392.5prime GH Drosophila melanogaster head pOT2 Drosophila
melanogaster cDNA clone GH27392 5prime, mRNA sequence.
ACCESSION AI516823
VERSION AI516823.1 GI:4419923
KEYWORDS EST.
SOURCE fruit fly.
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 593)
Harvey,D., Brokstein,P., Hong,L., Evans-Holm,M., Su,C., Tsang,G.,
Lewis,S. and Rubin,G.M.
BDGP/HMI Drosophila EST Project
Unpublished (2001)
Contact: Stapleton, M.
BDGP
Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/EST, est@fruitfly.berkeley.edu
Plate: 273 row: H column: 8
High quality sequence stop: 547.

FEATURES
Location/Qualifiers
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/db_xref="taxon:7227"
/clone="GH27392"
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/sex="male and female"
/dev_stage="adult"
/lab_host="DH5 - alpha"
/note="Organ: head; Vector: pOT2; Site_1: EcoRI; Site_2:
XhoI; Sized fractionated cDNAs were directly ligated into
pOT2. Plasmid cDNA library."

BASE COUNT      81 a 116 c 260 g 136 t
ORIGIN

Query Match      6.3%; Score 44; DB 9; Length 593;
Best Local Similarity 58.3%; Pred. NO. 0.3;
Matches 77; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

QY 35 GACACGCCCGCCGAGCAGATCTTGGCCAGATCTTCGCGCGCGCCCTGGTGTCCACC 94
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QY 95 CCGGCCACCGTTACCGCTGGAGAGGAATGCAATCTTCAACACCCGCGCTCTCCCGCA 154
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Db 385 GCGGCCACCGATTCCGTTACCTCCACGAGATGCCACCTCCACCGCGGATTCCGCCACC 326

QY 155 CCTTCGGATATA 166
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Db 325 TCCTCCGGAATA 314

Search completed: May 18, 2003, 12:46:42
Job time : 1504 secs

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Db 1615 AAAATGGCATCTTCAACACCCCGCTCTCCCGCACCTTCGGATATACCTCTCAAGCGTACC 1556
Qy 181 ACAGTCAGAACGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 240
Db 1555 ACAGTCAGAACGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 1496
Qy 241 CCCCCAGGAGGGGTCAACACCCCGCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 300
Db 1495 CCCCCAGGAGGGGTCAACACCCCGCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 1436
Qy 301 GTTAAGGTGAATTTCTGGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 360
Db 1435 GTTAAGGTGAATTTCTGGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 1376
Qy 361 AGTCTGTATTTAGATGATAAATTTGTAACAAAGGCCACAGCCCTCACCTATGACCCC 420
Db 1375 ACTGCTGTATTTAGATGATAAATTTGTAACAAAGGCCACAGCCCTCACCTATGACCCC 1316
Qy 421 TATGTAACACTACTCTCCCGGCATACATACCCAGCCCTTCTCTACACTCCCGGTAC 480
Db 1315 TATGTAACACTACTCTCCCGGCATACATACCCAGCCCTTCTCTACACTCCCGGTAC 1256
Qy 481 TTTACCCCAAACTGCTCTAGATTTCACATTTGATTTACTTCCCAACCAACAAACAGA 540
Db 1255 TTTACCCCAAACTGCTCTAGATTTCACATTTGATTTACTTCCCAACCAACAAACAGA 1196
Qy 541 AACAGCTGTGGCTGAGACTACAACTCTGGAATGTAGACACAGCTAGGCCCTCGGCCT 600
Db 1195 AATCAGCTTTGGCTGAGCTACAACTCTGGAATGTAGACACAGCTAGGCCCTCGGCCT 1136
Qy 601 GCGTTCGAAACAGTATATACGACGAGCAATACATATCCGTGTAACCATGTATGTACAA 660
Db 1135 GCGTTCGAAACAGTATATACGACGAGCAATACATATCCGTGTAACCATGTATGTACAA 1076
Qy 661 TTTACAGAAATTTAATTTTAAAGACCCCGCTTAAACCCCTTAA 702
Db 1075 TTTACAGAAATTTAATTTTAAAGACCCCGCTTAAACCCCTTAA 1034

RESULT 2

US-09-935-428A-1/c
; Sequence 1, Application US/09935428A
; Patent No. US20020106639A1
; GENERAL INFORMATION:
; APPLICANT: WANG, LI
; APPLICANT: BABIUK, LORNE A.
; APPLICANT: POTTER, ANDREW A.
; APPLICANT: WILLSON, PHILIP
; TITLE OF INVENTION: POSTWEANING MULTISYSTEM WASTING SYNDROME VIRUS FROM
; FILE OF INVENTION: PIGS
; FILE REFERENCE: 9000-0040
; CURRENT FILING DATE: 2001-08-20
; PRIOR APPLICATION NUMBER: US/09/935,428A
; PRIOR FILING DATE: EARLIER FILING DATE: 09/209,961
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1998-12-10
; PRIOR FILING DATE: EARLIER FILING DATE: 60/069,233
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1997-12-11
; PRIOR FILING DATE: EARLIER FILING DATE: 60/069,750
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine Circovirus Type II
US-09-935-428A-1

Query Match 88.4%; Score 620.4; DB 10; Length 1768;
Best Local Similarity 92.7%; Pred. No. 2.3e-195;
Matches 651; Conservative 0; Mismatches 51; Indels 0; Gaps 0;
Qy 1 ATGACGTATCCAGGCGGTATCCCGAAGAGAGACACCCCGCGGCGCATCTTGGC 60
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Db 1735 ATGACGTATCCAGGAGGCGCTTACCGCAGAGAGACACCCCGCGCGCATCTTGGC 1676
Qy 61 CAGATCCTCGCGCGCGCGCTCGCTCCACCCCGCGCGCATCTTACCGCTGGAGAAG 120
Db 1675 CAGATCCTCGCGCGCGCGCTCGCTCCACCCCGCGCGCATCTTACCGCTGGAGAAG 1616
Qy 121 AAAATGGCATCTTCAACACCCCGCTCTCCCGCACCTTCGGATATATCTGTAAGCGAACC 180
Db 1615 AAAATGGCATCTTCAACACCCCGCTCTCCCGCACCTTCGGATATATCTGTAAGCGAACC 1556
Qy 181 ACAGTCAGAACGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 240
Db 1555 ACAGTCAGAACGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 1496
Qy 241 CCCCCAGGAGGGGTCAACACCCCGCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 300
Db 1495 CCCCCAGGAGGGGTCAACACCCCGCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 1436
Qy 301 GTTAAGGTGAATTTCTGGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 360
Db 1435 GTTAAGGTGAATTTCTGGCCCTCTCGGCGGTGACATGATGAGATTCAATTAATGACTTTCTT 1376
Qy 361 AGTCTGTATTTAGATGATAAATTTGTAACAAAGGCCACAGCCCTCACCTATGACCCC 420
Db 1375 ACTGCTGTATTTAGATGATAAATTTGTAACAAAGGCCACAGCCCTCACCTATGACCCC 1316
Qy 421 TATGTAACACTACTCTCCCGGCATACATACCCAGCCCTTCTCTACACTCCCGGTAC 480
Db 1315 TATGTAACACTACTCTCCCGGCATACATACCCAGCCCTTCTCTACACTCCCGGTAC 1256
Qy 481 TTTACCCCAAACTGCTCTAGATTTCACATTTGATTTACTTCCCAACCAACAAACAGA 540
Db 1255 TTTACCCCAAACTGCTCTAGATTTCACATTTGATTTACTTCCCAACCAACAAACAGA 1196
Qy 541 AACAGCTGTGGCTGAGACTACAACTCTGGAATGTAGACACAGCTAGGCCCTCGGCCT 600
Db 1195 AATCAGCTTTGGCTGAGCTACAACTCTGGAATGTAGACACAGCTAGGCCCTCGGCCT 1136
Qy 601 GCGTTCGAAACAGTATATACGACGAGCAATACATATCCGTGTAACCATGTATGTACAA 660
Db 1135 GCGTTCGAAACAGTATATACGACGAGCAATACATATCCGTGTAACCATGTATGTACAA 1076
Qy 661 TTTACAGAAATTTAATTTTAAAGACCCCGCTTAAACCCCTTAA 702
Db 1075 TTTACAGAAATTTAATTTTAAAGACCCCGCTTAAACCCCTTAA 1034

RESULT 3

US-09-935-428A-24/c
; Sequence 24, Application US/09935428A
; Patent No. US20020106639A1
; GENERAL INFORMATION:
; APPLICANT: WANG, LI
; APPLICANT: BABIUK, LORNE A.
; APPLICANT: POTTER, ANDREW A.
; APPLICANT: WILLSON, PHILIP
; TITLE OF INVENTION: POSTWEANING MULTISYSTEM WASTING SYNDROME VIRUS FROM
; FILE OF INVENTION: PIGS
; FILE REFERENCE: 9000-0040
; CURRENT FILING DATE: 2001-08-20
; PRIOR APPLICATION NUMBER: US/09/935,428A
; PRIOR FILING DATE: EARLIER FILING DATE: 09/209,961
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1998-12-10
; PRIOR FILING DATE: EARLIER FILING DATE: 60/069,233
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1997-12-11
; PRIOR FILING DATE: EARLIER FILING DATE: 60/069,750
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 24
; LENGTH: 1343
; TYPE: DNA
; ORGANISM: Porcine Circovirus Type II

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: May 18, 2003, 11:41:54 ; Search time 164 Seconds
(without alignments)
5521.565 Million cell updates/sec

Title: US-09-514-245B-25
Perfect score: 702
Sequence: 1 atgacgtatccaaggaggcg.....accccccaacttaacccttaa 702

Scoring table:

IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 810007 seqs, 644969091 residues

Total number of hits satisfying chosen parameters: 1620014

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_NA.*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq.*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
9: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
10: /cgn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq.*
11: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
12: /cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq.*
13: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
14: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
C 1	623.6	88.8	1768	10	US-09-935-428A-11
C 2	620.4	88.4	1768	10	US-09-935-428A-1
C 3	618.8	88.1	1343	10	US-09-935-428A-24
C 4	618.8	88.1	1768	9	US-10-112-540-1
C 5	381.6	54.4	1767	10	US-09-784-962-1
C 6	381.6	54.4	1767	10	US-09-884-514-1
C 7	378.4	53.9	1767	10	US-09-784-962-2
C 8	378.4	53.9	1767	10	US-09-884-514-2
C 9	340	48.4	1768	10	US-09-784-962-3
C 10	340	48.4	1768	10	US-09-784-962-4
C 11	340	48.4	1768	10	US-09-884-514-3
C 12	340	48.4	1768	10	US-09-884-514-4
C 13	339	48.3	1768	10	US-09-884-514-6
C 14	307.8	43.8	1759	10	US-09-935-428A-2
C 15	273.4	38.9	7460	9	US-10-038-001-7
C 16	256.4	36.5	5285	9	US-10-038-001-1
C 17	256.4	36.5	5650	9	US-10-038-001-2
C 18	199.4	28.4	1759	10	US-09-784-962-5
C 19	199.4	28.4	1759	10	US-09-884-514-5

20	42.6	6.1	592	12	US-10-042-417-31	Sequence 31, Appl
21	7869	5.8	3000	9	US-09-954-456-1921	Sequence 1921, Ap
22	39.6	5.6	3116	9	US-10-227-353-5	Sequence 5, Appli
23	39.6	5.4	972	9	US-09-855-754-3	Sequence 3, Appli
24	37.8	5.4	1890	10	US-09-477-737-1	Sequence 1, Appli
25	37.8	5.4	2038	10	US-09-802-669-24	Sequence 24, Appl
26	37.8	5.4	2038	10	US-09-880-107-2102	Sequence 2102, Ap
27	37.8	5.4	3715	10	US-09-880-107-2300	Sequence 2300, Ap
28	37.2	5.3	1848	12	US-10-062-254-239	Sequence 239, App
29	37	5.3	2462	9	US-09-922-364A-48	Sequence 48, Appl
30	37	5.3	2462	9	US-09-254-590-48	Sequence 48, Appl
31	37	5.3	2462	9	US-10-115-695-48	Sequence 48, Appl
32	37	5.3	2462	9	US-10-116-561-48	Sequence 48, Appl
33	37	5.3	2462	9	US-10-115-671-48	Sequence 48, Appl
34	37	5.3	2462	9	US-10-115-415-48	Sequence 48, Appl
35	37	5.3	2462	9	US-10-116-260-48	Sequence 48, Appl
36	36.4	5.2	1449	9	US-09-920-671-3	Sequence 3, Appli
37	36.4	5.2	139257	9	US-09-920-671-11	Sequence 11, Appl
38	36.2	5.2	1107	10	US-09-925-300-466	Sequence 466, App
39	36.2	5.2	127197	9	US-09-754-853A-1	Sequence 1, Appli
40	36	5.1	1767	10	US-09-784-962-1	Sequence 1, Appli
41	36	5.1	1767	10	US-09-884-514-1	Sequence 1, Appli
42	36	5.1	2936	9	US-10-108-605-54	Sequence 54, Appl
43	35.8	5.1	520	9	US-10-184-644-332	Sequence 332, App
44	35.8	5.1	520	9	US-10-184-634-332	Sequence 332, App
45	35.6	5.1	15720	9	US-10-025-380-1058	Sequence 1058, Ap

ALIGNMENTS

RESULT 1

US-09-935-428A-11/c
Sequence 11, Application US/09935428A
Patent No. US20020106639A1

GENERAL INFORMATION:

APPLICANT: WANG, LI

APPLICANT: BABLUK, LORNE A.

APPLICANT: POTTER, ANDREW A.

APPLICANT: WILLSON, PHILIP

TITLE OF INVENTION: POSTWEANING MULTISYSTEM WASTING SYNDROME VIRUS FROM

FILE OF INVENTION: PIGS

FILE REFERENCE: 9000-0040

CURRENT APPLICATION NUMBER: US/09/935,428A

CURRENT FILING DATE: 2001-08-20

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/209,961

PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-10

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/069,233

PRIOR FILING DATE: EARLIER FILING DATE: 1997-12-11

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/069,750

PRIOR FILING DATE: EARLIER FILING DATE: 1997-12-16

NUMBER OF SEQ ID NOS: 24

SOFTWARE: PatentIn ver. 2.0

SEQ ID NO 11

LENGTH: 1768

TYPE: DNA

ORGANISM: Porcine Circovirus Type II

US-09-935-428A-11

Query Match 88.8%; Score 623.6; DB 10; Length 1768;
Best Local Similarity 93.0%; Pred. No. 2e-196;
Matches 653; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

QY	1	ATGACGTATCCAAAGGAGCGGTTCACGAGAAGACACCGCCCGCCGACCGTACCGCTCGAAGG	120
Db	1735	ATGACGTATCCAAAGGAGCGGTTCACGAGAAGACACCGCCCGCCGACCGTACCGCTCGAAGG	1676
QY	61	CAGATCCCTCCGCGCGCCCGCCCTGGCTCGTCCACCCCGCCGACCGTACCGCTCGAAGG	120
Db	1675	CAGATCCCTCCGCGCGCGCCCGCCCTGGCTCGTCCACCCCGCCGACCGTACCGCTCGAAGG	1616
QY	121	AAAAATGGCATCTTCAACACCGCCCTCTCCCGCACCTTCGGATATACTGTCAAGCAACC	180

; PRIOR FILING DATE: 1999-07-04
; PRIOR APPLICATION NUMBER: 98 08777
; PRIOR FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1767
; TYPE: DNA
; ORGANISM: Porcine circovirus
; US-09-784-962-1

Query Match 54.4%; Score 381.6; DB 10; Length 1767;
Best Local Similarity 99.0%; Pred. No. 5.2e-116; Indels 0; Gaps 0;
Matches 384; Conservative 0; Mismatches 4

QY 315 CTGGCCCTGCTCCCGGATCACCCAGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
Db - - - - -
QY 1767 CTGGCCCTGCTCCCGGATCACCCAGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTCT 1708
Db - - - - -
QY 375 AGATGATAAATTTGTAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
Db - - - - -
QY 1707 AGATGATAAATTTGTAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1648
Db - - - - -
QY 435 CTCCCGCCATACCAATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 494
Db - - - - -
QY 1647 CTCCCGCCATACCAATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 1588
Db - - - - -
QY 495 TGTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAACAAACAGCTGTGGCT 554
Db - - - - -
QY 1587 TGTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAACAAACAGCTGTGGCT 1528
Db - - - - -
QY 555 GAGACTACAACTGCTGGAATGTAGACCAAGTGGGCTCGGCCTCGGCTCGGTTTCGAAACAG 614
Db - - - - -
QY 1527 GAGACTACAACTGCTGGAATGTAGACCAAGTGGGCTCGGCCTCGGCTCGGTTTCGAAACAG 1468
Db - - - - -
QY 615 TATATAGACCAAGTAACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 674
Db - - - - -
QY 1467 TATATAGACCAAGTAACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 1408
Db - - - - -
QY 675 TTTTAAAGACCCCGCCACTTAAACCCCTTAA 702
Db - - - - -
QY 1407 TCTTAAAGACCCCGCCACTTAAACCCCTTAA 1380
Db - - - - -

RESULT 6
US-09-884-514-1/c
; Sequence 1, Application US/09884514
; Patent No. US20020146432A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.
; APPLICANT: CHAPPUIS, Gilles E.
; APPLICANT: NEWTONARDS, Francis McNeilly
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE OF INVENTION: REAGENTS
; FILE REFERENCE: ALLAN
; CURRENT APPLICATION NUMBER: US/09/884,514
; PRIOR FILING DATE: 2000-06-19
; PRIOR APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 1767

; TYPE: DNA
; ORGANISM: Porcine circovirus
; US-09-884-514-1

Query Match 54.4%; Score 381.6; DB 10; Length 1767;
Best Local Similarity 99.0%; Pred. No. 5.2e-116; Indels 0; Gaps 0;
Matches 384; Conservative 0; Mismatches 4

QY 315 CTGGCCCTGCTCCCGGATCACCCAGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
Db - - - - -
QY 1767 CTGGCCCTGCTCCCGGATCACCCAGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTCT 1708
Db - - - - -
QY 375 AGATGATAAATTTGTAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
Db - - - - -
QY 1707 AGATGATAAATTTGTAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 1648
Db - - - - -
QY 435 CTCCCGCCATACCAATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 494
Db - - - - -
QY 1647 CTCCCGCCATACCAATACCCAGCCCTTCTCCTACCACTCCCGGTACTTTACCCCAAAACC 1588
Db - - - - -
QY 495 TGTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAACAAACAGCTGTGGCT 554
Db - - - - -
QY 1587 TGTCTAGATTCTACTATTGATTACTTCCAAACCAACAAACAAACAAACAGCTGTGGCT 1528
Db - - - - -
QY 555 GAGACTACAACTGCTGGAATGTAGACCAAGTGGGCTCGGCCTCGGCTCGGTTTCGAAACAG 614
Db - - - - -
QY 1527 GAGACTACAACTGCTGGAATGTAGACCAAGTGGGCTCGGCCTCGGCTCGGTTTCGAAACAG 1468
Db - - - - -
QY 615 TATATAGACCAAGTAACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 674
Db - - - - -
QY 1467 TATATAGACCAAGTAACAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 1408
Db - - - - -
QY 675 TTTTAAAGACCCCGCCACTTAAACCCCTTAA 702
Db - - - - -
QY 1407 TCTTAAAGACCCCGCCACTTAAACCCCTTAA 1380
Db - - - - -

RESULT 7
US-09-784-962-2/c
; Sequence 2, Application US/09784962
; Patent No. US20020146431A1
; GENERAL INFORMATION:
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRANKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/784,962
; CURRENT FILING DATE: 2001-02-16
; PRIOR APPLICATION NUMBER: 09/347,594
; PRIOR FILING DATE: 1999-07-04
; PRIOR APPLICATION NUMBER: 98 08777
; PRIOR FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1767
; TYPE: DNA
; ORGANISM: Porcine circovirus
; US-09-784-962-2

Query Match 53.9%; Score 378.4; DB 10; Length 1767;
Best Local Similarity 98.5%; Pred. No. 6e-115; Indels 6; Gaps 0;
Matches 382; Conservative 0; Mismatches 6

QY 315 CTGGCCCTGCTCCCGGATCACCCAGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
Db - - - - -
QY 1767 CTGGCCCTGCTCCCGGATCACCCAGGTGACAGGGAGTGGGCTCCAGTGTGTTATTTCT 1708
Db - - - - -
QY 375 AGATGATAAATTTGTAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
Db - - - - -

US-09-935-428A-24

Query Match 88.1%; Score 618.8; DB 10; Length 1343;
Best Local Similarity 92.6%; Pred. No. 6.6e-195;
Matches 650; Conservative 0; Mismatches 52; Indels 0; Gaps 0;

QY 1 ATGACGTATCCAGGAGGCGTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 60
DB 1310 ATGACGTATCCAGGAGGCGTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 1251
QY 61 CAGATCTCGCGCGCGCCCTGGCTGTCACCCCGCCACCGTTACCGCTGAGAGG 120
DB 1250 CAGATCTCGCGCGCGCCCTGGCTGTCACCCCGCCACCGTTACCGCTGAGAGG 1191
QY 121 AAAAAATGGCATCTTCAACACCGCGCTCTCCCGACCTTCGGATATCTGTCAACGGAAC 180
DB 1190 AAAAAATGGCATCTTCAACACCGCGCTCTCCCGACCTTCGGATATCTGTCAACGCTACC 1131
QY 181 CAGTTCAGAACCGCCCTCTCGCGGGTGGACATGATGAGATTCAATATTAATGACTTTCTT 240
DB 1130 CAGTTCAGAACCGCCCTCTCGCGGGTGGACATGATGAGATTCAATATTAATGAGACTTTGT 1071
QY 241 CCCCCAGGAGGGGTCAACACCGCGCTCTGCGCCCTTGAATACTACAGAAATGAAGAG 300
DB 1070 CCCCCAGGAGGGGTCAACACCGCGCTCTGATACCTTTGAATACTACAGAAATGAAGAG 1011
QY 301 GTTAAGGTTCAATCTGGCGCTGCTCCCGCATCACCGAGGTGACAGGGAGTGGGCTCC 360
DB 1010 GTTAAGGTTCAATCTGGCGCTGCTCCCGCATCACCGAGGTGATAGGGAGTGGGCTCC 951
QY 361 AGTGTCTGTTATTTAGATGATACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCC 420
DB 950 AGTGTCTGTTATTTAGATGATACTTTGTAAACAAAGGCCACAGCCCTAACCTATGACCCA 891
QY 421 TAGTAAACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 480
DB 890 TAGTAAACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 831
QY 481 TTTACCCCAACCTGCTCTAGATTTCACATTTGATTTACCTTCCAAACCAACAAAGA 540
DB 830 TTTACCCCAACCTGCTCTAGATTTCACATTTGATTTACCTTCCAAACCAACAAAGA 771
QY 541 AACCACTGTGGCTGAGACTACAACTGCTGGAATGTAGACCACTGAGGCTCGGCAC 600
DB 770 AACCACTGTGGCTGAGACTACAACTGCTGGAATGTAGACCACTGAGGCTCGGCAC 711
QY 601 GCCTTCGAAACAGTATATACGACCAAGGAATACAAATATCGTGTAAACCATGTATGTACAA 660
DB 710 GCCTTCGAAACAGTATATACGACCAAGGAATACAAATATCGTGTAAACCATGTATGTACAA 651
QY 661 TTCAGAGAAATTTAATTTTAAAGACCCCGCCACTTAACCCCTAA 702
DB 650 TTCAGAGAAATTTAATCTTAAAGACCCCGCCACTTAACCCCTAA 609

RESULT 4

US-10-112-540-1/c
; Sequence 1, Application US/10112540
; Patent No. US20020177216A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Qiang
; APPLICANT: Tikoo, Suresh K.
; APPLICANT: Willson, Philip
; APPLICANT: Bablu, Lorne A.
; TITLE OF INVENTION: METHODS TO CULTURE CIRCOVIRUS
; CURRENT APPLICATION NUMBER: US/10/112,540
; PRIOR FILING DATE: 2002-03-27
; PRIOR APPLICATION NUMBER: US 60/279,173
; PRIOR FILING DATE: 2001-03-27
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1

; LENGTH: 1768

; TYPE: DNA
; ORGANISM: Porcine circovirus
US-10-112-540-1

Query Match 88.1%; Score 618.8; DB 9; Length 1768;
Best Local Similarity 92.6%; Pred. No. 7.7e-195;
Matches 650; Conservative 0; Mismatches 52; Indels 0; Gaps 0;

QY 1 ATGACGTATCCAGGAGGCGTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 60
DB 1735 ATGACGTATCCAGGAGGCGTTACCGAAGAAGACACCGCCCGCAGCCATCTTGGC 1676
QY 61 CAGATCTCGCGCGCGCCCTGGCTGCTCCACCCCGCCACCGTTACCGCTGAGAGG 120
DB 1675 CAGATCTCGCGCGCGCCCTGGCTGCTCCACCCCGCCACCGTTACCGCTGAGAGG 1616
QY 121 AAAAAATGCATCTTCAACACCGCGCTCTCCCGACCTTCGGATATCTGTCAACGGAAC 180
DB 1615 AAAAAATGCATCTTCAACACCGCGCTCTCCCGACCTTCGGATATCTGTCAACGCTACC 1556
QY 181 CAGTTCAGAACCGCCCTCTCGCGGGTGGACATGATGAGATTCAATATTAATGACTTTCTT 240
DB 1555 CAGTTCAGAACCGCCCTCTCGCGGGTGGACATGATGAGATTCAATATTAATGAGACTTTGT 1496
QY 241 CCCCCAGGAGGGGTCAACACCGCGCTCTGTCGCCCTTTGAATACTACAGAAATGAAGAG 300
DB 1495 CCCCCAGGAGGGGTCAACACCGCGCTCTGATACCTTTGAATACTACAGAAATGAAGAG 1436
QY 301 GTTAAGGTTGAATTTCTGGCGCTGCTCCCGCATCACCGAGGTGACAGGGAGTGGGCTCC 360
DB 1435 GTTAAGGTTGAATTTCTGGCGCTGCTCCCGCATCACCGAGGTGATAGGGAGTGGGCTCC 1376
QY 361 AGTGTCTGTTATTTAGATGATACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCC 420
DB 1375 AGTGTCTGTTATTTAGATGATACTTTGTAAACAAAGGCCACAGCCCTAACCTATGACCCA 1316
QY 421 TAGTAAACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 480
DB 1315 TAGTAAACTACTCTCCCGCATACCATACCCAGCCCTTCTCTACCACTCCCGGTAC 1256
QY 481 TTTACCCCAACCTGCTCTAGATTTCACATTTGATTTACCTTCCAAACCAACAAAGA 540
DB 1255 TTTACCCCAACCTGCTCTAGATTTCACATTTGATTTACCTTCCAAACCAACAAAGA 1196
QY 541 AACCACTGTGGCTGAGACTACAACTGCTGGAATGTAGACCACTGAGGCTCGGCAC 600
DB 1195 AACCACTGTGGCTGAGACTACAACTGCTGGAATGTAGACCACTGAGGCTCGGCAC 1136
QY 601 CGGTTCCGAAACAGTATATACGACCAAGGAATACAAATATCGTGTAAACCATGTATGTACAA 660
DB 1135 CGGTTCCGAAACAGTATATACGACCAAGGAATACAAATATCGTGTAAACCATGTATGTACAA 1076
QY 661 TTCAGAGAAATTTAATTTTAAAGACCCCGCCACTTAACCCCTAA 702
DB 1075 TTCAGAGAAATTTAATCTTAAAGACCCCGCCACTTAACCCCTAA 1034

RESULT 5

US-09-784-962-1/c
; Sequence 1, Application US/09784962
; Patent No. US20020146431A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRAKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/784,962
; CURRENT FILING DATE: 2001-02-16
; PRIOR APPLICATION NUMBER: 09/347,594

RESULT 10

US-09-784-962-4/c
; Sequence 4, Application US/09784962
; Patent No. US20020146431A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRATOMKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/784,962
; CURRENT FILING DATE: 2001-02-16
; PRIOR APPLICATION NUMBER: 09/347,594
; PRIOR FILING DATE: 1999-07-04
; PRIOR APPLICATION NUMBER: 98 08777
; PRIOR FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-784-962-4

Query Match 48.4%; Score 340; DB 10; Length 1768;
Best Local Similarity 92.3%; Pred. No. 3.5e-102;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;
Qy 315 CTGCGCTGCTCCCGGATCACCCAGGTGACAGGGGAGTGGGCTCCAGTGGCTGTATT 374
Db 1768 CTGCGCTGCTCCCGGATCACCCAGGTGACAGGGGAGTGGGCTCCAGTGGCTGTATT 1709
Qy 375 AGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 434
Db 1708 AGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 1649
Qy 435 CTCCCGCCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTACCCCAACCC 494
Db 1648 CTCCCGCCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTACCCCAACCC 1589
Qy 495 TGCTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAACAAAGAACACAGCTGTGGCT 554
Db 1588 TGTTCTTGACTCCACTATTGATTACTTCCAAACCAACAAACAAAGAACACAGCTGTGGCT 1529
Qy 555 GAGACTACAACTGCTGGAATGTAGACCACTAGGCTCGGCCTCGGCCTCGGCCTCGGCCTCGGCCT 614
Db 1528 GAGACTACAACTGCTGGAATGTAGACCACTAGGCTCGGCCTCGGCCTCGGCCTCGGCCTCGGCCT 1469
Qy 615 TATATACGACCAAGATACATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 674
Db 1468 TAAATACGACCAAGATACATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 1409
Qy 675 TTTTAAAGACCCCGCCACTTAAACCCCTTAA 702
Db 1408 TCTTAAAGACCCCGCCACTTAAACCCCTTAA 1381

RESULT 11

US-09-884-514-3/c
; Sequence 3, Application US/09884514
; Patent No. US20020146432A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.

; APPLICANT: CHAPPUIS, Gilles E.
; APPLICANT: NEWTONARDS, Francis McNeilly
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/884,514
; CURRENT FILING DATE: 2000-06-19
; PRIOR APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-884-514-3

Query Match 48.4%; Score 340; DB 10; Length 1768;
Best Local Similarity 92.3%; Pred. No. 3.5e-102;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;
Qy 315 CTGCGCTGCTCCCGGATCACCCAGGTGACAGGGGAGTGGGCTCCAGTGGCTGTATT 374
Db 1768 CTGCGCTGCTCCCGGATCACCCAGGTGACAGGGGAGTGGGCTCCAGTGGCTGTATT 1709
Qy 375 AGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 434
Db 1708 AGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACACTCTC 1649
Qy 435 CTCCCGCCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTACCCCAACCC 494
Db 1648 CTCCCGCCATACCATACCCAGCCCTTCTCTACCACTCCCGGTACTTACCCCAACCC 1589
Qy 495 TGCTCTAGATTTCACCTATTGATTACTTCCAAACCAACAAACAAAGAACACAGCTGTGGCT 554
Db 1588 TGTTCTTGACTCCACTATTGATTACTTCCAAACCAACAAACAAAGAACACAGCTGTGGCT 1529
Qy 555 GAGACTACAACTGCTGGAATGTAGACCACTAGGCTCGGCCTCGGCCTCGGCCTCGGCCTCGGCCT 614
Db 1528 GAGACTACAACTGCTGGAATGTAGACCACTAGGCTCGGCCTCGGCCTCGGCCTCGGCCTCGGCCT 1469
Qy 615 TATATACGACCAAGATACATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 674
Db 1468 TATATACGACCAAGATACATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTTAA 1409
Qy 675 TTTTAAAGACCCCGCCACTTAAACCCCTTAA 702
Db 1408 TCTTAAAGACCCCGCCACTTAAACCCCTTAA 1381

RESULT 12

US-09-884-514-4/c
; Sequence 4, Application US/09884514
; Patent No. US20020146432A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.
; APPLICANT: CHAPPUIS, Gilles E.
; APPLICANT: NEWTONARDS, Francis McNeilly
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/884,514
; CURRENT FILING DATE: 2000-06-19

Db 1707 AGATGATACTTTGTACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAACTACTC 1648
QY 435 CTCGCGCCATACCATAACCCAGCCCTTCTCTACCACTCCGCGTACTTTACCCCAAC 494
Db 1647 CTCGCGCCATACCATAACCCAGCCCTTCTCTACCACTCCGCGTACTTTACCCCAAC 1588
QY 495 TGCTCTAGATTTCACATTTGATTACTTCCAAACCAACAAACAAAGAACCACTGTGGCT 554
Db 1587 TGCTCTAGATTTCACATTTGATTACTTCCAAACCAACAAACAAAGAACCACTGTGGCT 1528
QY 555 GAGACTACAACTGCTGGAATGTAGACACAGCTAGGCTCGGCACTCGGTTCGAAACAG 614
Db 1527 GAGACTACAACTGCTGGAATGTAGACACAGCTAGGCTCGGCACTCGGTTCGAAACAG 1468
QY 615 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTAA 674
Db 1467 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTAA 1408
QY 675 TTTTAAAGACCCCCCACTTAACCCCTTAA 702
Db 1407 TCTTAAAGACCCCCCACTTAACCCCTTAA 1380

RESULT 8

US-09-884-514-2/c
; Sequence 2, Application US/09884514
; Patent No. US20020146432A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREIRE, Catherine E.
; APPLICANT: NEWTONARDS, Francis McNeilly
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE REFERENCE: REAGENTS
; CURRENT APPLICATION NUMBER: US/09/884,514
; CURRENT FILING DATE: 2000-06-19
; PRIOR APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 1767
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-884-514-2

Query Match 53.9%; Score 378.4; DB 10; Length 1767;
Best Local Similarity 98.5%; Pred. No. 6e-115;
Matches 382; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 315 CTGCGCCCTGCTCCCGCATACCAGGCTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
Db 1767 CTGCGCCCTGCTCCCGCATACCAGGCTGACAGGGAGTGGGCTCCAGTGTGTTATTTCT 1708
QY 375 AGATGATACTTTGTAAACAGGCCACAGCCCTCACCTATGACCCCTATGTAACTACTC 434
Db 1707 AGATGATACTTTGTAAACAGGCCACAGCCCTCACCTATGACCCCTATGTAACTACTC 1648
QY 435 CTCGCGCCATACCATAACCCAGCCCTTCTCTACCACTCCGCGTACTTTACCCCAAC 494
Db 1647 CTCGCGCCATACCATAACCCAGCCCTTCTCTACCACTCCGCGTACTTTACCCCAAC 1588
QY 495 TGCTCTAGATTTCACATTTGATTACTTCCAAACCAACAAACAAAGAACCACTGTGGCT 554

Db 1587 TGCTCTAGATTTCACATTTGATTACTTCCAAACCAACAAACAAAGAACCACTGTGGCT 1528
QY 555 GAGACTACAACTGCTGGAATGTAGACACAGCTAGGCTCGGCACTCGGTTCGAAACAG 614
Db 1527 GAGACTACAACTGCTGGAATGTAGACACAGCTAGGCTCGGCACTCGGTTCGAAACAG 1468
QY 615 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTAA 674
Db 1467 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTAA 1408
QY 675 TTTTAAAGACCCCCCACTTAACCCCTTAA 702
Db 1407 TCTTAAAGACCCCCCACTTAACCCCTTAA 1380

RESULT 9

US-09-784-962-3/c
; Sequence 3, Application US/09784962
; Patent No. US20020146431A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRAKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/784,962
; CURRENT FILING DATE: 2001-02-16
; PRIOR APPLICATION NUMBER: 09/347,594
; PRIOR FILING DATE: 1999-07-04
; PRIOR APPLICATION NUMBER: 98 08777
; PRIOR FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-784-962-3

Query Match 48.4%; Score 340; DB 10; Length 1768;
Best Local Similarity 92.3%; Pred. No. 3.5e-102;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;
QY 315 CTGCGCCCTGCTCCCGCATACCAGGCTGACAGGGAGTGGGCTCCAGTGTGTTATTTT 374
Db 1768 CTGCGCCCTGCTCCCGCATACCAGGCTGATAGGGAGTGGGCTCCAGTGTGTTATTTCT 1709
QY 375 AGATGATACTTTGTAAACAGGCCACAGCCCTCACCTATGACCCCTATGTAACTACTC 434
Db 1708 AGATGATACTTTGTAAACAGGCCACAGCCCTCACCTATGACCCCTATGTAACTACTC 1649
QY 435 CTCGCGCCATACCATAACCCAGCCCTTCTCTACCACTCCGCGTACTTTACCCCAAC 494
Db 1648 CTCGCGCCATACCATAACCCAGCCCTTCTCTACCACTCCGCGTACTTTACCCCAAC 1589
QY 495 TGCTCTAGATTTCACATTTGATTACTTCCAAACCAACAAACAAAGAACCACTGTGGCT 554
Db 1588 TGCTCTAGATTTCACATTTGATTACTTCCAAACCAACAAACAAAGAACCACTGTGGCT 1529
QY 555 GAGACTACAACTGCTGGAATGTAGACACAGCTAGGCTCGGCACTCGGTTCGAAACAG 614
Db 1528 GAGGCTACAAACCTCTAGAAATGTGAGACACAGCTAGGCTCGGCACTCGGTTCGAAACAG 1469
QY 615 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTAA 674
Db 1468 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAAATTAA 1409
QY 675 TTTTAAAGACCCCCCACTTAACCCCTTAA 702
Db 1408 TCTTAAAGACCCCCCACTTAACCCCTTAA 1381

us-10-038-001-7

	Query Match	38.9%	Score 273.4	DB 9:	Length 7460;
	Best Local Similarity	68.4%	Pred. No. 1.1e-79;		
	Matches 411; Conservative 0;	Mismatches 181;	Indels 9;	Gaps 2	
Qy	1	ATGACGTATCCAAAGAGCGCTTACCAGAAGAAAGACACCGCCGCCCGCAGGCATCTTGCC	60		
Dy	602	ATGACGTGGCCAAAGAGCGTTACCGAGAAGAGAGGACCGCCGCCCGCAGGCATCTTGA	543		
Qy	61	CAGATCTCCGCCGCCGCCCTGGCTCGTCCACCC-----CGCGACCGTTTACCGCTGG	114		
Dy	542	AACATCTCCGACAAGACCATATTTCGACACACCCCGCTTCAGAAAACCGTTACAGATGG	483		
Qy	115	AGAAGGAAAAATGGCAITCTTCAAACACCGGCTCTCCCGCACCTTTGGGATATACTGTCAAG	174		
Dy	482	CGCCGAAGAGCGGTATCTTCAATTTGGCGGCTTTCTAGAGAAATTTGTACTCACCAATAGAA	423		
Qy	175	CGAACACAGTCACAACGCCCTCTCTGGCGGTGGACATGATGAGATTCAATATTAAATGAC	234		
Dy	422	GGA---GGACACTCGCAGCCATCTTGGAACTTTAACCAGCTCAGATTCAACATCGGCCAG	366		
Qy	235	TTCCTTCCCCCAGCAGGGGGTCAAAACCCCGCTCTGTGCCCTTTGTAATACACAGATA	294		
Dy	365	TTCTCTCCCCTCAGCGGGCACCACCCCTTACCCCTTACCTTTCCCAATACTACCGTATT	306		
Qy	295	AGAAAGTTAAGGTTGAATTTCTGGCCCTTGTCTCCCGGATCACCCAGGTTGACAGGGGAGTG	354		
Dy	305	AGAAAGCTAATATGAATTTTACCNCAGACACCCCATCACTCTAATCAAAGAGTCTTT	246		
Qy	355	GGCTCCAGTGTGTATTTTAGATGATAACTTTGTAAACAAAGGCACAGCCCTCACTPAT	414		
Dy	245	GGGTCCACTGCTGTATCTTGGATGCCAACTTTGTAAACCCCTTCCAACCACTTGGCCPAT	186		
Qy	415	GACCCCTATGTAACTACTCTCTCCGGCATACCATACCCAGCCCTTCTCTCTACCACTCC	474		
Dy	185	GACCCCTATATTAATACTACTCTCTCCGGCACACCATTAAGGCAGCCCTTTACCTTACCACTCC	126		
Qy	475	CGGTACTTTTACCCCAACCTTGTCTTGTATTTCACTATTGTATTTCTTCAACCAACAC	534		
Dy	125	AGGTACTTTCACCCCAACCTTGAGCTGGACCAACAATTTGATTTGGTTCCAGCAANTAT	66		
Qy	535	AAAAGAACCACTGTGGCTGAGACTACAAACTGCTGGAAATGTAGACACGCTAGGGCTC	594		
Dy	65	AAAAGAACCACTGTGGCTTCCATTTTAAATACCCACACCAATGTCGACACACAGGCTTA	6		
Qy	595	G 595			
Dy		I			
		5 G 5			

Search completed: May 18, 2003, 13:00:07
Job time : 170 secs

Search completed: May 18, 2003, 13:00:07
Job time : 170 secs

; PRIOR APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-884-514-4

Query Match 48.4%; Score 340; DB 10; Length 1768;
Best Local Similarity 92.3%; Pred. No. 3.5e-102;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;
QY 315 CTGCCCTGCTCCCGATACCCAGGGTGACAGGGGAGTGGGCTCCAGTGGTGTATTTT 374
DB 1768 CTGCCCTGCTCCCGATACCCAGGGTGATAGGGGAGTGGGCTCCAGTGGTGTATTTT 1709
QY 375 AGATGATAACTTTGTAAAGAGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTC 434
DB 1708 AGATGATAACTTTGTAAAGAGCCACAGCCCTAACCTATGACCCATATGTAACACTACTC 1649
QY 435 CTCGCCGATACCATACCCAGGCTCTCTCTACACCTCCCGGTACTTTACCCCAAAACC 494
DB 1648 CTCGCCGATACCATACCCCAACCTCTCTCTACACCTCCCGGTACTTTACCCCAAAACC 1589
QY 495 TGCTCTAGATTCTACTATTGATTACTTCCAAACCAACAAAGAAACACAGCTGGCT 554
DB 1588 TGCTCTGACTCCACTATTGATTACTTCCAAACCAACAAAGAAACAGCTTTGGCT 1529
QY 555 GAGACTACAACTGCTGGAATGTAGACCCAGTGGCTCGGCAGTGGCTCGGAAACAG 614
DB 1528 GAGACTACAACTCTGGAATGTGGACAGTGGCTCGGCAGTGGCTCGGAAACAG 1469
QY 615 TATATAGACAGCAATACATATCCGTTACCATGTATGTACAAATTCAGAGAAATTTAA 674
DB 1468 TAAATAGACAGCAATACATATCCGTTACCATGTATGTACAAATTCAGAGAAATTTAA 1409
QY 675 TTTTAAAGACCCCGCTTAAACCTTAA 702
DB 1408 TCTTAAAGACCCCGCTTAAACCTTAA 1381

RESULT 13
US-09-884-514-6/c
; Sequence 6, Application US/09884514
; Patent No. US20020146432A1
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon
; APPLICANT: MEEHAN, Brian
; APPLICANT: CLARK, Edward
; APPLICANT: HAINES, Deborah
; APPLICANT: HASSARD, Lori
; APPLICANT: HARDING, John
; APPLICANT: CHARREYRE, Catherine E.
; APPLICANT: CHAPPUIS, Gilles E.
; APPLICANT: NEWTONARDS, Francis McNeilly
; TITLE OF INVENTION: NEW PORCINE CIRCOVIRUSES, VACCINES AND DIAGNOSTIC
; FILE OF INVENTION: REAGENTS
; FILE REFERENCE: ALLAN
; CURRENT APPLICATION NUMBER: US/09/884,514
; CURRENT FILING DATE: 2000-06-19
; PRIOR APPLICATION NUMBER: FR 9800873
; PRIOR FILING DATE: 1998-01-22
; PRIOR APPLICATION NUMBER: FR 9803707
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: FR 97/12382
; PRIOR FILING DATE: 1997-10-03
; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
; FEATURE:
; NAME/KEY: variation
; LOCATION: (1)..(1768)
; OTHER INFORMATION: N represents A or C or G or T
US-09-884-514-6

Query Match 48.3%; Score 339; DB 10; Length 1768;
Best Local Similarity 92.2%; Pred. No. 7.5e-102;
Matches 357; Conservative 0; Mismatches 30; Indels 0; Gaps 0;
QY 316 TCGCCCTGCTCCCGATACCCAGGGTGACAGGGGAGTGGGCTCCAGTGGTGTATTTT 375
DB 1768 TCGCCCTGCTCCCGATACCCAGGGTGATAGGGGAGTGGGCTCCAGTGGTGTATTTT 1709
QY 376 GATGATAACTTTGTAAAGAGCCACAGCCCTCACCTATGACCCCTATGTAACACTACTCC 435
DB 1708 GATGATAACTTTGTAAAGAGCCACAGCCCTAACCTATGACCCATATGTAACACTACTCC 1649
QY 436 TCCGCCCATACCATACCCAGGCTCTCTCTACCACTCCCGGTACTTTACCCCAAAACC 495
DB 1648 TCCGCCCATACCAATCCCAACCTCTCTCTACCACTCCCGGTACTTTACCCCAAAACC 1589
QY 496 GTCTCTAGATTCTACTATTGATTACTTCCAAACCAACAAAGAAACAGCTGTGGCTG 555
DB 1588 GTCTCTGACTCCACTATTGATTACTTCCAAACCAACAAAGAAACAGCTTTGGCTG 1529
QY 556 AGACTACAACTGCTGGAATGTAGACCCAGTGGCTCGGCAGTGGCTCGGAAACAGT 615
DB 1528 AGCTTACAACTCTGGAATGTAGACCCAGTGGCTCGGCAGTGGCTCGGAAACAGT 1469
QY 616 ATATAGACAGCAATACATATCCGTTACCATGTATGTACAAATTCAGAGAAATTTAA 675
DB 1468 ATATAGACAGCAATACATATCCGTTACCATGTATGTACAAATTCAGAGAAATTTAA 1409
QY 675 TTTTAAAGACCCCGCTTAAACCTTAA 702
DB 1408 CTTAAAGACCCCGCTTAAACCTTAA 1382

RESULT 14
US-09-935-428A-2/c
; Sequence 2, Application US/09935428A
; Patent No. US20020106639A1
; GENERAL INFORMATION:
; APPLICANT: WANG, LI
; APPLICANT: BABIUK, LORNE A.
; APPLICANT: POTTER, ANDREW A.
; APPLICANT: WILLSON, PHILIP
; TITLE OF INVENTION: POSTWEANING MULTISYSTEM WASTING SYNDROME VIRUS FROM
; TITLE OF INVENTION: PIGS
; FILE REFERENCE: 9000-0040
; CURRENT APPLICATION NUMBER: US/09/935,428A
; CURRENT FILING DATE: 2001-08-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/209,961
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-10
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/069,233
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/069,750
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-12-16
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 1759
; TYPE: DNA
; ORGANISM: Porcine Circovirus Type I
US-09-935-428A-2
Query Match 43.8%; Score 307.8; DB 10; Length 1759;